Auto Site Automotive VCP NW2113



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January 14, 2009

Estate of (b) (6) (b) (6) Snohomish, Washington 98296

Summary Letter Site Remediation Former Shell Oil Station 11803 Des Moines Memorial Drive South Seattle, Washington 0260-002

Attention:

Ms. (b) (6)

#### 1.0 INTRODUCTION AND BACKGROUND

This letter summarizes the results of soil remediation performed at the site of the former Shell service station located at 11803 Des Moines Memorial Drive South in unincorporated King County, Washington. The property is presently part of the Estate of (b) (6) been owned by the family since 1974. The site location is shown in family since 1974. The site location is shown in Figure 1.

#### 1.1 PHASE I ENVIRONMENTAL SITE ASSESSMENT, ADDITIONAL RESEARCH, AND SITE RECONNAISSANCE

Pinnacle GeoSciences reviewed Environmental Associates, Inc.'s report titled Phase I Environmental Assessment, dated February 28, 2005, for the site. In addition, we performed limited additional historical research at the site. The results of our review are summarized in our Summary Report; Former Shell Oil Service Station, dated February 28, 2007. The results of the Phase I ESA and our additional research indicated that Shell Oil owned and operated a fuel service station with maintenance bays at the site from 1962 to 1974, at which time Shell Oil sold the site and facility to the (b) (6) family. Historical air photos show the likely locations of two service islands on the east side of the site, and the possible location of underground storage tanks on the north side of the site. The (b) (6) did not operate the site as a service station. The status of the USTs (underground storage tanks) was not documented and the Phase I research did not conclusively demonstrate whether the USTs had been removed. The (b) (6) family has rented the site to several automotive repair businesses.

We identified two underground hydraulic hoists and a filled in floor sump in the northern two lube bays of the building during the site reconnaissance which we performed as part of our historical research. In addition, an above-ground waste oil tank was present outside the back door on the west side of the building, and an above-ground heating oil tank was present on the north



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side of the building. Drums of spent petroleum products were observed stored in the area on the south side of the building.

We performed a geophysical reconnaissance at the site in January 2008, in an effort to locate whether USTs remain at the site. The results of the survey are summarized in our memorandum dated January 15, 2008. The geophysical reconnaissance indicated that two small USTs, each about 4 feet in diameter, were present near the northwest corner of the building, and that three concrete slabs are present in the eastern portion of the site at the location where fuel service islands were observed in the historic air photos. No large fuel USTs were identified by the geophysical survey. The two small USTs detected by the geophysical reconnaissance are not registered, and are not present in Ecology's UST database.

The results of our historical research, site reconnaissance and geophysical survey identified the following potential sources of petroleum-related soil and ground water contamination at the site:

- Former fuel USTs, location unconfirmed but they were likely removed from the northern portion of the site.
- Former heating oil and waste oil USTs, remaining near the northwest corner of the building as confirmed by the geophysical survey.
- Former fuel service islands, removed from the eastern portion of the site. No aboveground portions of the service islands remain.
- Existing waste oil above-ground storage tank on the west side of the building.
- Existing hydraulic hoists and former sump in the northern two lube bays.
- Drum storage area on the south side of the building.

#### 1.2 PHASE II SOIL AND GROUNDWATER ASSESSMENT

Pinnacle GeoSciences performed a Phase II soil and ground water assessment at the site in February and May, 2008 to assess whether soil and ground water contamination was likely to be present at the locations of these potential sources of contamination. Soil borings, Geoprobes and hand auger explorations were performed, and soil and ground water samples were tested for petroleum-related contamination. The results of our Phase II assessment activities are summarized in our *Summary Letter; Site Assessment; Former Shell Oil Station*, dated June 27, 2008.

The results of the site assessment indicated that gasoline-related soil contamination was present in the likely location of the former fuel USTs, and mineral spirits/Stoddard solvent-related soil contamination was present beneath the northern service bay area. The gasoline-related soil contamination in the likely former USTs location appeared to extend to a maximum depth of 12 to 14 feet, and the mineral spirits-related soil contamination in the northern service bay appeared to extend to a maximum depth of about 12 feet. Non-contaminated soil was confirmed beneath the contaminated soil at both locations.

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Soil contamination in excess of MTCA cleanup standards was not identified in the areas of the former fuel service islands, the waste oil above-ground tank, or the drum storage area. Significant soil contamination was not encountered in the area of the waste oil and heating oil USTs, although a recommendation was made to remove the USTs and perform additional assessment at that time. The second service bay from the north was not assessed because of the presence of concrete debris in the subsurface which did not allow explorations to be extended to an adequate depth.

Ground water was encountered in some, but not all, of the explorations completed for the Phase II site assessment. Where encountered, ground water was present in thin seams at depths ranging from 12.5 to 22 feet. In the explorations where ground water was encountered, it was not in contact with contaminated soil. Petroleum-related contaminants were not detected in the ground water samples that were tested. Of the two ground water samples that were tested, one was obtained from the boring located in the center of the likely former USTs location, and one was obtained from a boring located in the expected downgradient direction from the service bays and the heating oil and waste oil USTs. Because soil contamination was not documented in contact with ground water, and because contaminants were not detected in the ground water samples which were tested, no recommendations were made for additional ground water assessment.

Based on the results of the results of the Phase I ESA and Phase II soil and ground water assessment, we recommended the following remediation be performed:

- Excavate and dispose of gasoline-contaminated soil from the probable former fuel USTs location.
- Decommission and remove the waste oil and heating oil USTs, and excavate and dispose of any contaminated soil encountered.
- Remove the hoist and former sump in the northern service bay, and excavate and dispose
  of mineral spirits/Stoddard solvent-contaminated soil beneath the northern service bay.
- Excavate a test pit in the second service bay from the north to evaluate whether
  contaminated soil is present there, and excavate and dispose of contaminated soil there if
  any is encountered.

The (b) (6) family contracted Clear Creek Contractors to perform these activities. Pinnacle GeoSciences monitored and documented the remediation activities, and obtained soil samples to document that the remediation goals were successfully achieved. Those activities are summarized in this report.

#### 2.0 SCOPE

The objective of our services at the site was to decommission and remove the heating oil and waste oil USTs, remediate known areas of soil contamination at the site, and evaluate whether additional remediation was necessary in the areas of the heating oil and waste oil USTs and the second service bay. Our specific scope of services to achieve these objectives was as follows:



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  - Assist in selecting a cleanup contractor. Provide the selected contractor with a briefing and other information necessary to prepare them for the planned cleanup.
  - 2. Assist in retaining a geotechnical engineer to monitor the structural safety of the building during excavation in the service bays, and to make recommendations on how to structurally support the building if the excavation extended too close to footings.
  - 3. Observe excavation of gasoline-contaminated soil from the probable former fuel USTs location, field screen soil to identify and segregate non-contaminated overburden and identify when limits of contaminated soil have been reached, obtain soil samples from the stockpiled non-contaminated overburden, and obtain confirmation soil samples from the final limits of the excavation.
  - 4. Observe and document the removal of the hydraulic hoist and former sump from the northern service bay. Observe excavation of mineral spirits/Stoddard solvent-contaminated soil from the northern service bay, field screen soil to identify when limits of contaminated soil have been reached, and obtain confirmation soil samples from the final limits of the excavation.
  - 5. Observe and document the removal of the waste oil and heating oil USTs. Observe excavation of waste oil-contaminated soil from this location, field screen soil to identify when limits of contaminated soil have been reached, and obtain confirmation soil samples from the final limits of the excavation.
  - 6. Observe excavation of a test pit adjacent to the hydraulic hoist in the second service bay from the north. Field screen soil and obtain soil samples to evaluate whether contaminated soil is present at this location.
  - 7. Test soil samples obtained from the stockpiles, test pit and from the limits of the excavations for the appropriate analytes as summarized in Table 1. All testing was performed by CCI Analytical Laboratory, Inc. of Everett, Washington.
  - 8. Prepare a written report summarizing the field activities.

#### 3.0 SITE AND VICINITY DESCRIPTION

#### 3.1 VICINITY

The site is located in Seattle, Washington, as shown in Figure 1. The ground surface in the vicinity of the site generally slopes downward towards the north and northeast. The nearest body of water is the Duwamish River, which is approximately 3,200 feet east northeast. Based on Geology of Seattle, Washington, United States of America (Glaster and Laprade, 1991) near surface soils at the site consist of Vashon till. Vashon till is described as an overconsolidated, poorly sorted mixture of sand, silt and gravel.

Our review of Ecology water well logs in the area of the site indicated that minor ground water is present in thin, discontinuous permeable lenses at various depths in the till. More significant aquifers are probably present at depths significantly greater than 50 feet.

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#### 3.2 SITE

The average site elevation is approximately 290 feet with respect to the National Geodetic Vertical Datum of 1929. The site surface slopes downward to the north. The site is completely covered by either the building or asphalt with the exception of a small area on the west side of the building.

Site surface water drainage is off site to a catch basin on the south side of the South 118th St. right of way.

The site, and the approximate location of site features, is shown in Figure 2.

#### 4.0 CONTAMINANTS OF CONCERN AND CLEANUP LEVELS

Our site history research and the results of the soil and ground water assessment indicated that the contaminants of concern in the probably former fuel USTs location was primarily GRO (gasoline-range organics). BTEX (benzene, toluene, ethylbenzene and zylenes) were not detected in this area of the site either during previous assessment activities or during the site remediation. Low levels of DRO (diesel-range organics) and HO (heavy oils) were detected in this area during the remediation at concentrations much less that the applicable cleanup levels.

The primary contaminant of concern in the service bays was mineral spirits, which is a non-chlorinated solvent similar to Stoddard solvent. The two products are typically used interchangeably and testing laboratories usually do not attempt to differentiate between the two products when detected in soil or groundwater. For the remainder of this report, the product is referred to as "mineral spirits," with the exception that in the laboratory reports it is referred to as "mineral spirits" or "Stoddard solvent" interchangeably. Low levels of benzene and ethylbenzene were detected in one soil sample obtained from the service bays, at concentrations less than the applicable cleanup levels. Low levels of DRO and HO were detected in this area during the remediation at concentrations much less that the applicable cleanup levels. CVOCs (chlorinated volatile organic compounds) were not considered contaminants of concern in the northern service bay because they were tested for in previous assessment activities and not detected. CVOCs were considered potential contaminants of concern in the second service bay, which had not been previously assessed. Metals were also considered potential contaminants of concern in the service bays, but were not detected.

DRO and HO were the primary contaminants of concern in the heating oil and waste oil UST location. CVOCs, cPAHs (carcinogenic polycyclic aromatic hydrocarbons), PCBs (polychlorinated biphenyls) and metals were also considered potential contaminants of concern in this area, but were not detected. The laboratory chromatograms did not indicate that GRO was a contaminant of concern in the heating oil and waste oil USTs area.

Contaminant concentrations are compared to the MTCA Method A Soil Cleanup Levels for Unrestricted Land Use, MTCA Table 740-1. These cleanup levels are the default cleanup levels established by MTCA for "simple" sites with a limited number of contaminants. Table 740-1 requires that a cleanup level of 30 mg/Kg be used for GRO where benzene is present or where the sum of BTEX compounds is 1% or more of the gasoline mixture. Benzene was



1.6 %

detected in one sample obtained from the site during the remediation, so the cleanup level of 30 mg/Kg was used for GRO. In instances where a compound was detected that does not have a MTCA Method A Soil Cleanup Level, the MTCA Method B Cleanup Level generated by Ecology's Clarc database was used.

#### 5.0 FIELD ACTIVITIES

#### 5.1 GENERAL

Clear Creek Contractors removed the heating oil and waste oil USTS, removed the hydraulic hoist and the sump/floor drain in the northern service bay, and excavated contaminated soil from the probable fuel USTs area, the northern service bay, and the heating oil/waste oil UST location, on December 10 through 16, 2008. Soil samples were obtained from stockpiles and the limits of the excavations, additional excavation was performed and additional samples obtained where necessary during this period. Upon completion of removing these facilities and excavating contaminated soil, the excavations were backfilled with non-contaminated on-site soil and/or imported non-contaminated structural fill, and the concrete and asphalt was patched. The locations of the excavations and excavation soil samples are shown in Figure 2. Our field procedures are included in Attachment A. Excavation activities, soil sampling, and laboratory testing results are discussed in the following sections. Sample field data and testing methods are summarized in Table 1. Laboratory testing results are summarized in Table 2. The laboratory reports are included in Attachment B.

#### 5.2 FORMER FUEL USTS AREA

Contaminated soil was excavated from the probable former fuel USTs area on December 10, 2008. The contaminated soil extended from a depth of approximately 6 feet bgs (below ground surface) to depths ranging from 12 to 14 feet bgs. The excavation extended to these depths. Ground water was not present in the excavation. Approximately 100 cubic yards of non-contaminated soil was excavated from above the contaminated soil. Pinnacle GeoSciences assisted in segregating non-contaminated soil from contaminated soil, and evaluated when the lateral and vertical limits of the contaminated soil had been reached using field screening methods described in Attachment A. Excavation of contaminated soil continued until field screening indicated that the limits of the contaminated soil had been reached. Field screening indicated that the contaminant in the soil was volatile, probably gasoline. Approximately 200 tons of contaminated soil was excavated from the former fuel USTs, loaded into dump trucks, and hauled to Allied Waste's Seattle transfer facility for transportation to their Roosevelt Regional Landfill for disposal.

Ten discrete soil samples (EX-1-11.0 through EX-10-14.0) were obtained from the final limits of the excavation. The sample data is summarized in Table 1. Note that in all excavation sample names, the first numeral is the sample's sequential number and the second numeral is the depth in feet bgs from which the sample was obtained. The samples were obtained from locations where field screening or other observations indicated the contamination was most likely. All of the samples were tested for GRO and BTEX. Several of the samples were tested for DRO and

HO if the results of the GRO testing indicated that DRO or HO were present in the sample. Several selected samples were also tested for MTBE (methyl-tert butyl ether) and/or lead.

Laboratory testing results indicated that BTEX compounds and MTBE were not detected at concentrations exceeding the laboratory's lower reporting limit. GRO either was not detected at concentrations exceeding the laboratory lower reporting limit or was detected at concentrations less than the MTCA Method A Soil Cleanup Level of 30 mg/Kg. DRO and HO either were not detected at concentrations exceeding the laboratory lower reporting limits or were detected at concentrations less than the MTCA Method A Soil Cleanup Levels of 2,000 mg/Kg and 2,000 mg/Kg, respectively for these products. In the opinion of the laboratory, the DRO and HO detected in sample EX-7-10.0 consisted of a mixture of light oil and lube oil, while the GRO detected in that sample consisted of weathered gasoline. It is therefore not appropriate to sum the concentrations of the GRO, DRO and HO when comparing to the GRO cleanup level of 30 mg/Kg. Lead either was not detected at concentrations exceeding the laboratory lower reporting limit or was detected at a concentration less than the MTCA Method A Soil Cleanup Level in the samples tested.

A total of 100 cubic yards of apparently non-contaminated overburden soil was stockpiled on site for testing and subsequent reuse as on-site backfill if appropriate. Five discrete soil samples (CSP-1 through CSP-5) were obtained from the stockpile in accordance with Ecology's document titled *Guidance for Remediation of Petroleum Contaminated Soils*. The samples were tested for BTEX and GRO. BTEX and GRO were not detected in the samples at concentrations exceeding the laboratory lower reporting limits.

#### 5.3 SERVICE BAYS

Concrete was broken in the northern service bay, and the hydraulic hoist and floor drain/sump were removed on December 11, 2008. Contaminated soil was excavated from the northern service bay on December 11 through 16. The contaminated soil extended from the base of the floor drain/sump to a depth of 10 to 11 feet bgs. The excavation extended to a depth of 12 to 12.5 feet bgs. Ground water was not present in the excavation. No non-contaminated soil was segregated in the service bay excavation. Pinnacle GeoSciences evaluated when the lateral and vertical limits of the contaminated soil had been reached using field screening methods described in Attachment A. Excavation of contaminated soil continued until field screening indicated that the limits of the contaminated soil had been reached. Field screening indicated that the contaminant in the soil was volatile, probably mineral spirits based on information from the previous soil assessment.

Approximately 58 tons of contaminated soil was initially excavated from the northern service bay, loaded into dump trucks, and hauled to Allied Waste's Seattle transfer facility for transportation to their Roosevelt Regional Landfill for disposal.

Seven discrete soil samples (BEX-1-8.0 through BEX-7-8.0) were obtained from the limits of the excavation. The sample data is summarized in Table 1. The samples were obtained from locations where field screening or other observations indicated the contamination was most likely. All of the samples were tested for GRO, DRO and HO. Several of the samples were tested for

BTEX where significant concentrations of GRO were detected. One sample was also tested for metals (arsenic, cadmium, chromium, lead and mercury).

Laboratory testing results indicated that GRO was present in sample BEX-2-8.0, obtained from the west wall of the service bay excavation, at a concentration exceeding the MTCA Method A Soil Cleanup Level. Benzene was also detected in this sample at a concentration equal to the Cleanup Level. Approximately 5 tons of additional soil (for a total of 63 tons from the completed excavation) was excavated from the north wall of the excavation and a new sample (BEX-8-8.0) was obtained from the extended west wall of the excavation on December 16. The new sample BEX-8-8.0 replaces contaminated sample BEX-2-8.0 as representative of the extended west wall.

Sample P-1-12.5, obtained during the previous assessment activities, is also representative of the base of the excavation, and was tested for GRO, DRO, HO and CVOCs. None of the analytes tested for were detected at concentrations exceeding the laboratory lower reporting limit in this sample.

GRO either was not detected at concentrations exceeding the laboratory lower reporting limit or was detected at concentrations less than the MTCA Method A Soil Cleanup Level of 30 mg/Kg in samples obtained from the final limits of the excavation. DRO and HO and BTEX (where tested) were not detected at concentrations exceeding the laboratory lower reporting limits in the samples obtained from the final limits of the excavation. In the opinion of the laboratory, the product present in the samples was mineral spirits, which is consistent with the results of the previous soil assessment. Metals either were not detected at concentrations exceeding the laboratory lower reporting limit or were detected at a concentration less than the MTCA Method A Soil Cleanup Level in the sample tested.

A test pit (TP-1) was extended from the south side of the northern service bay excavation to the hydraulic hoist and floor drain/sump in the second service bay from the north. The test pit exposed the side of the sump and was within several feet of the hoist, as shown in Figure 2. Two samples (TP-1-4.0 and TP-1-8.0) were obtained from the test pit, immediately beneath the base of the sump and at a depth equivalent to the base of the hoist. The samples were tested for GRO, DRO, HO, and sample TP-1-4.0 was tested for CVOCs. DRO, HO and CVOCs were not detected at concentrations exceeding the laboratory lower reporting limits. GRO was detected at concentrations less than the MTCA Method A Soil Cleanup Levels in the samples.

#### 5.4 HEATING OIL AND WASTE OIL USTS

One 500-gallon steel heating oil UST and one 500-gallon waste oil UST were removed from a single excavation on December 12, 2008. The heating oil UST appeared to be in good condition with little corrosion visible. The waste oil UST appeared to be in moderate condition with some corrosion. Neither UST had visible holes. Contaminated soil was excavated from the heating oil and waste oil UST excavation on December 12 and 16. The contaminated soil extended from near the surface to a depth of about 8 feet bgs. The excavation extended to a depth of 8 feet bgs. Ground water was not present in the excavation. No non-contaminated soil was segregated in the heating oil and waste oil UST excavation. Pinnacle GeoSciences evaluated

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when the lateral and vertical limits of the contaminated soil had been reached using field screening methods described in Attachment A. Excavation of contaminated soil continued until field screening indicated that the limits of the contaminated soil had been reached. Field screening indicated that the contaminant in the soil was non-volatile, probably waste oil.

Approximately 30 tons of contaminated soil was excavated from the heating oil and waste oil UST excavation, loaded into dump trucks, and hauled to Allied Waste's Seattle transfer facility for transportation to their Roosevelt Regional Landfill for disposal.

Six discrete soil samples (WOEX-1-6.0 through WOEX-6-8.0) were obtained from the limits of the excavation. The sample data is summarized in Table 1. The samples were obtained from locations where field screening or other observations indicated the contamination was most likely. All of the samples were tested for DRO and HO. One of the samples was tested for CVOCs and carcinogenic PAHs. Another of the samples was tested for metals (arsenic, cadmium, chromium, lead and mercury) and PCBs. Since field screening did not indicate the presence of volatiles, and the chromatograms from the DRO and HO testing did not indicate that GRO was present, GRO and BTEX were not tested for.

DRO and HO either was not detected at concentrations exceeding the laboratory lower reporting limits or were detected at concentrations less than the MTCA Method A Soil Cleanup Levels in samples obtained from the final limits of the excavation. Carcinogenic PAHs and PCBs (where tested) were not detected at concentrations exceeding the laboratory lower reporting limits in the samples obtained from the final limits of the excavation. Metals either were not detected at concentrations exceeding the laboratory lower reporting limits or were detected at concentrations less than the MTCA Method A Soil Cleanup Levels in the sample tested. One chlorinated compound, 1,2-dichloroethane, was detected at a concentration of 0.022 mg/Kg. This compound does not have a MTCA Method A Soil Cleanup Level. The most conservative (lowest) soil cleanup level for 1,2-dichloroethane is the MTCA Method B Carcinogen Standard Formula Value of 11 mg/Kg. The detected concentration was less than this cleanup level. Other CVOCs were not detected at concentrations exceeding the laboratory lower reporting limit.

One discrete stockpile sample (WOSP-1) was obtained from the contaminated soil as it was excavated, and was tested for DRO and HO. DRO was not detected in the sample. HO was detected at a concentration of 9,300 mg/Kg, exceeding the MTCA Method A Soil Cleanup Level of 2,000 mg/Kg.

#### 5.5 SOIL DISPOSAL

A total of 293 tons of contaminated soil was excavated from the fuel USTs excavation, service bay excavation, and heating oil and waste oil USTs excavation. The contaminated soil was loaded into trucks and transported to Allied Waste's transfer station, from which it was hauled to Allied Waste's Roosevelt Regional Landfill for permanent disposal. Roosevelt Regional Landfill is a permitted Subtitle D landfill. Landfill receipts documenting disposal of contaminated soil are included in Attachment C.

A total of about 100 cubic yards of non-contaminated overburden soil was excavated from the fuel USTs excavation, and stockpiled on site. Five discrete soil samples were obtained from



the non-contaminated stockpile as described in Section 5.2. GRO and BTEX, the contaminants of concern, were not detected at concentrations exceeding the laboratory lower reporting limit in the samples, and the non-contaminated soil was subsequently used as backfill in the fuel USTs excavation.

#### 6.0 CONCLUSIONS

Our review of a Phase I ESA performed for the site, and additional historical sources indicate that a single generation of service station facilities has existed at the site. The service station facilities included several potential sources of contamination: fuel USTs, two service islands, a waste oil UST and heating oil UST, two hydraulic hoists and one or more lube bay sumps at the locations of the hydraulic hoists.

Our previous Phase II soil and ground water assessment indicated that soils at the site generally consist of glacial till (overconsolidated sandy silt), with several feet of less consolidated disturbed or weathered sandy silt overlying the overconsolidated soil. Ground water appears to be present in several thin, discontinuous zones at depths ranging from 12.5 to 22 feet bgs and deeper.

The results of the Phase II soil and ground water assessment indicated that soil contamination in excess of the MTCA Method A Soil Cleanup Levels was present in the probable former fuel UST location and in the northern service bay. Additional assessment was recommended in the second service bay from the north and we recommended that the heating oil and waste oil UST location be removed and further assessed at that time. The site assessment did not indicate the presence of soil contamination at the locations of the former service islands, drum storage areas, aboveground waste oil storage area, or the southern two service bays.

Ground water was encountered at several locations during the Phase II site assessment, but not in contact with contaminated soil. Ground water testing did not indicate the presence of ground water contamination. One ground water sample location was obtained near the center of the fuel USTs area, and the other from downgradient or near downgradient of the service bays and heating oil and waste oil USTs (assuming an northeasterly ground water flow direction mimicking the local surface topography).

Contaminated soil was excavated from the probable former fuel USTs location. The contaminated soil extended to a maximum depth of 12 to 14 feet bgs. Soil samples from the final limits of the excavation indicated that contaminants were not present at concentrations exceeding the MTCA Method A Soil Cleanup Levels, and that contaminated soil had been successfully removed. No ground water was present in the excavation.

The hydraulic hoist and floor drain/sump was removed from the northern service bay. Contaminated soil was excavated from this location. The contaminated soil extended to a maximum depth of 10 to 11 feet bgs. Soil samples from the final limits of the excavation indicated that contaminants were not present at concentrations exceeding the MTCA Method A Soil Cleanup Levels, and that contaminated soil had been successfully removed. No ground water was present in the excavation.

The 500 gallon heating oil UST and the 500-gallon waste oil UST were decommissioned and removed. Both of these USTs were unregistered. Contaminated soil was excavated from this location. The contaminated soil extended to a maximum depth of 8 feet bgs. Soil samples from the final limits of the excavation indicated that contaminants were not present at concentrations exceeding the MTCA Method A Soil Cleanup Levels, and that contaminated soil had been successfully removed. No ground water was present in the excavation.

All contaminated soil was disposed of offsite at a permitted Subtitle D landfill.

All excavations were backfilled with non-contaminated soil.

In our opinion, no additional soil assessment or remediation is necessary at the site.

Ground water was not observed in the excavations. Based on the results of the Phase II soil and ground water assessment, where ground water was encountered it was not in contact with contaminated soil. The native soil at the site is low-permeability glacial till. In our opinion, it is unlikely that contaminants have migrated to ground water. Ground water testing during the Phase II soil and ground water assessment also indicated that ground water has not been impacted. In our opinion, no additional ground water assessment or remediation is necessary at the site.

#### 7.0 LIMITATIONS

Pinnacle GeoSciences, Inc. prepared this report for use by the Estate of Mary W. Benson. This report may be made available to regulatory agencies and to other parties authorized by the Estate of Mary W. Benson. The report is not intended for use by others and the information contained herein is not applicable to other sites.

Pinnacle GeoSciences has relied upon information provided by others in our description of historical conditions. The available data does not provide definitive information with regard to all past uses, operations or incidents at the site.

Our interpretations of site conditions are based on our field observations and on the testing results as described in the report and attached appendices. Our opinions are based on field screening and laboratory testing of discrete soil and ground water samples. It is always possible that soil or ground water contamination could remain in areas of the site which were not explored. Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted environmental science practices for environmental services of this type in Washington at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.



### 8.0 CLOSING

Pinnacle GeoSciences, Inc. appreciates the opportunity to provide environmental consulting services to the Estate of (b) Please call if you have questions concerning this project.

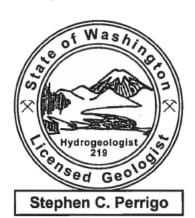
Sincerely, Pinnacle GeoSciences, Inc.

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Norman L. Puri, P.E. Senior Engineer

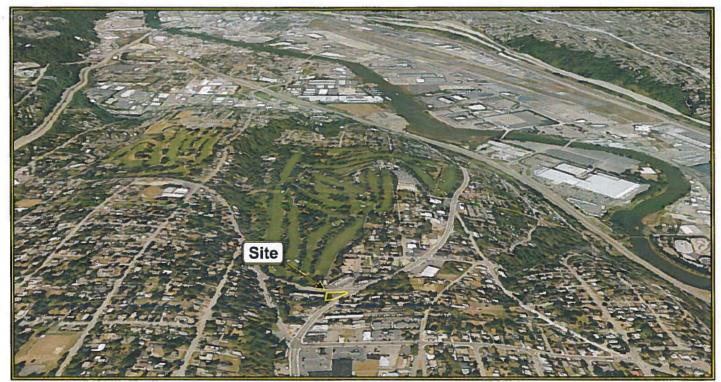


Stephen C. Perrigo, L.G., L.H.G. Principal

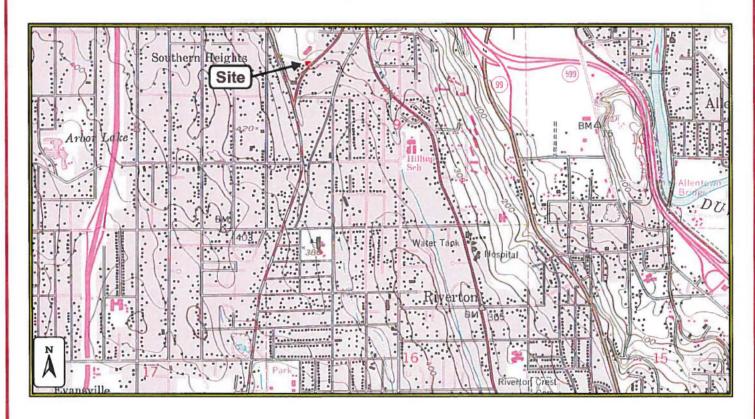


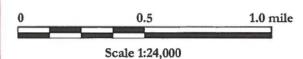
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Four copies submitted



Source: Google Earth, 2002 Image. Perspective view with vertical exaggeration, no scale.

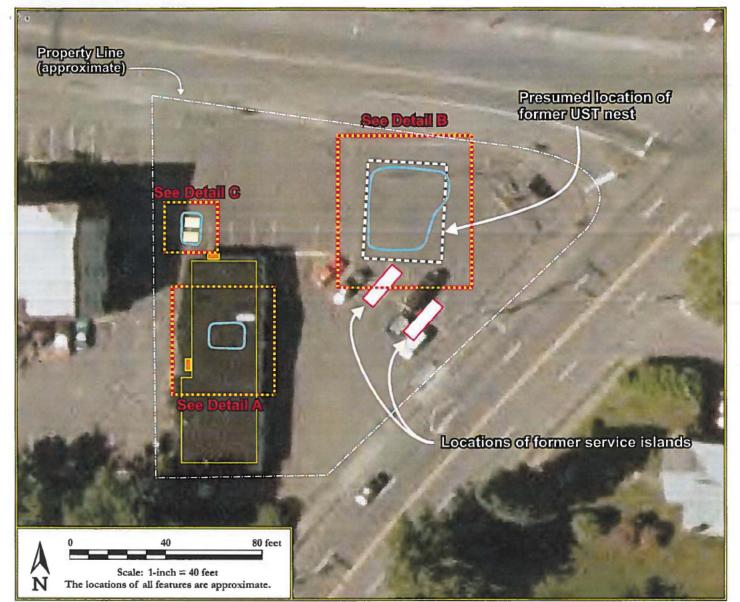




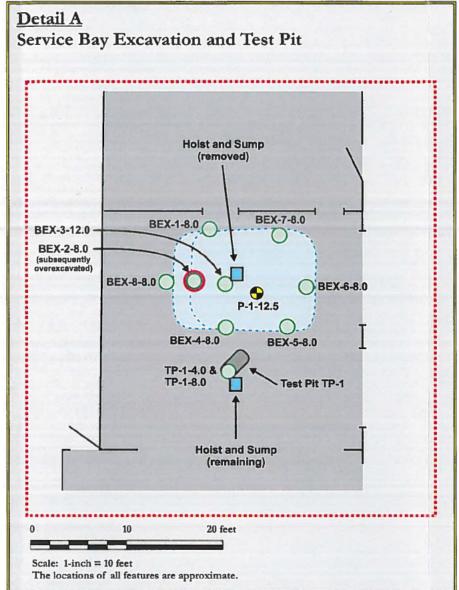
Reference Map: USGS 7.5 minute Quadrangle: Des Moines, WASH. 1949, Photorevised 1968 and 1973 Figure 1
Vicinity Map

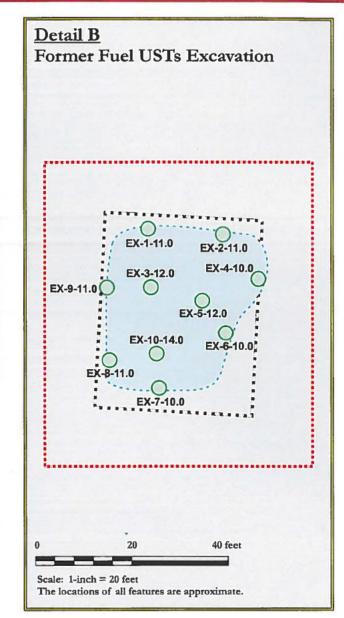
(b) (6) Property

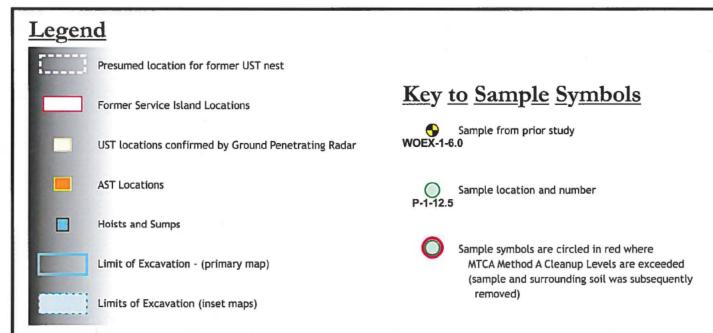
11803 Des Moines Memorial
Drive South
Seattle, Washington
Pinnacle GeoSciences











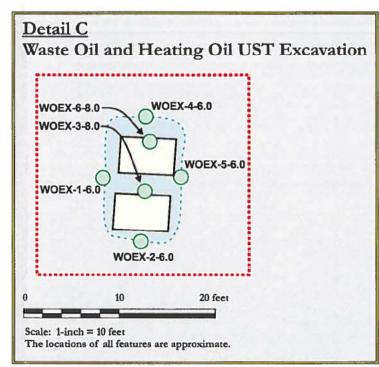


Figure 2
Excavation and Sample Locations
(b) (6) Property
11803 Des Moines Memorial
Drive South
Seattle, Washington

Pinnacle GeoSciences

## TABLE 1

# SUMMARY OF SOIL SAMPLE DATA AND FIELD SCREENING RESULTS <sup>1</sup> SITE REMEDIATION 11803 DES MOINES MEMORIAL DRIVE

SEATTIE	WASHINGTON
SEATTLE,	WASHINGION

							Che	mical	Test	ing Pe	erform	ied 4
Sample		Sample Depth		Contaminant of	Field Screenir		BTEX	GRO	DRO	НО	Lead	CVOCs
Number <sup>2</sup>	Date	(feet)	Location	Concern	Headspace Sheen		Ä	9	Ω	"	-	5
Former fuel US					1							
EX-1-11.0	10-Dec-08	11.0	North wall		3.7	SS	X	X	X	X		
EX-2-11.0	10-Dec-08	11.0	North wall	1	1.9	SS	X	X				
EX-3-12.0 <sup>5</sup>	10-Dec-08	12.0	Northwest base	1	1.3	NS	X	X	X	X	Х	
EX-4-10.0 <sup>5</sup>	10-Dec-08	10.0	East wall	1	2.6	NS	X	X	X	X	X	
EX-5-12.0	10-Dec-08	12.0	Northeast base	1	1.9	SS	X	X				
EX-6-10.0	10-Dec-08	10.0	East wall	Gasoline	1.8	SS	X	X				
EX-7-10.0	10-Dec-08	10.0	South wall	1	2.5	SS	X	X	X	X		
EX-8-11.0	10-Dec-08	11.0	West wall	1	1.5	NS	X	X				
EX-9-11.0	10-Dec-08	11.0	West wall	7	1.4	NS	X	X				
EX-10-14.0 <sup>5</sup>	10-Dec-08	14.0	South base		2.8	NS	X	X				
North service ba	ay excavation											
BEX-1-8.0	11-Dec-08	8.0	North wall		4.2	SS	X	X	X	X		
BEX-2-8.0	11-Dec-08	8.0	West wall	1 1	5.7	SS	X	X	X	X		
BEX-3-12.0	11-Dec-08	12.0	Base	]	3.6	SS	X	X	X	X		
BEX-4-8.0	11-Dec-08	8.0	South wall	Mineral spirits	4.3	SS		X	X	X		
BEX-5-8.0	12-Dec-08	8.0	South wall		3.7	NS		X	X	X		
BEX-6-8.0	15-Dec-08	8.0	East wall		3.7	SS		X	X	X		
BEX-7-8.0 <sup>6</sup>	15-Dec-08	8.0	North wall		2.3	SS		X	X	X		
BEX-8-8.0	16-Dec-08	8.0	West wall, replaces BEX-2-8.0			NS	X	X	X	X		
South service b	oay test pit								10			
TP-1-4.0 <sup>7</sup>	11-Dec-08	4.0	Adjacent to southern hoist/sump	Mineral spirits	4.2	NS		X	X			X
TP-1-8.0	11-Dec-08	8.0		Willierar spirits	1.8	NS		X	X			
Heating oil and	waste oil UST	s excavation										
WOEX-1-6.0	12-Dec-08	6.0	West wall		2.3	SS			X	X		
WOEX-2-6.0	12-Dec-08	6.0	South wall	]	2.6	SS			X	X		
WOEX-3-8.0 8	12-Dec-08	8.0	South base	Heating oil/waste	3.1	SS			X	X		X
WOEX-4-6.0	16-Dec-08	6.0	North wall	oil		NS			X	X		
WOEX-5-6.0	16-Dec-08	6.0	East wall	]	-	NS			X	X		-
WOEX-6-8.0 9	16-Dec-08	8.0	North base			NS			X	X		
Non-contamina	ted stockpile											
CSP-1	10-Dec-08		Non-contaminated overburden		1.1	SS	X	X				
CSP-2	10-Dec-08		from gasoline excavation	]	1.1	SS	X	X				
CSP-3	10-Dec-08			Gasoline	1.1	SS	X	X				
CSP-4	10-Dec-08			]	1.6	SS	X	X				
CSP-5	10-Dec-08				1.9	SS	X	X				
Heating oil and	waste oil UST	s stockpile									- E	
WOSP-1	12-Dec-08	1 1 - 1	Contaminated soil from heating	Heating oil/waste	74.4	HS			X	X		
			oil/waste oil excavation	oil								

## Notes:

- <sup>1</sup> Samples analyzed by CCl Analytical Laboratories, Inc. of Everett, Washington.
- <sup>2</sup> Soil sample locations are shown on Figure 2. The number following the second hyphen is the depth, in feet and tenths of feet, that the sample was obtained from.
- <sup>3</sup> Field screening methods are described in Appendix A. NS = no sheen, SS = slight sheen, MS = moderate sheen, HS = heavy sheen.
- <sup>4</sup> Chemical analytical results are summarized in Table 2. BTEX = benzene, toluene, ethylbenzene, and xylenes; GRO = gasoline-range organics; DRO = diesel-range organics; HO = heavy oils; lead = total lead. Compound and product names are taken from MTCA Table 740-1, Method A Soil Cleanup Levels for Unrestricted Land Uses. Laboratory testing methods are presented in Table 2.
- <sup>5</sup> Samples were also tested for MTBE by EPA Method 8021.
- <sup>6</sup> Sample was also tested for MTCA 5 metals by EPA Method 6010.
- <sup>7</sup> Sample was also tested for CVOCs by EPA Method 8260.
- <sup>8</sup> Sample was also tested for carcinogenic PAHs by EPA Method 8270 and CVOCs by EPA Method 8260.
- $^{9}$  Sample was also tested for PCBs by EPA Method 8081 and MTCA 5 metals by EPA Method 6010..

## TABLE 2

# SUMMARY OF SOIL SAMPLE ANALYTICAL DATA <sup>1</sup> SITE ASSESSMENT

## 11803 DES MOINES MEMORIAL DRIVE SEATTLE, WASHINGTON

Sample	Benzene <sup>3</sup>	Toluene <sup>3</sup>	Ethylbenzene 3	Xylenes <sup>3</sup>	GRO 4	DRO 5	HO <sup>5</sup>	MTBE <sup>3</sup>	Lead <sup>6</sup>
Number <sup>2</sup>		(mg/Kg) D Q				(mg/Kg) D <sub>Q</sub>			(mg/Kg) D
Former fuel USTs area excavation									
EX-1-11.0	0.03 U	0.05 U	0.05 U	0.2 U	3 U	25 U	50 t		
EX-2-11.0	0.03 U	0.05 U	0.05 U	0.2 U	3 U				
EX-3-12.0	0.03 U	0.05 U	0.05 U	0.2 U	5	25 U	50 t	0.1 U	5.0 U
EX-4-10.0	0.03 U	0.05 U	0.05 U	0.2 U	15	25 U	50 t	0.1 U	6.3 U
EX-5-12.0	0.03 U	0.05 U	0.05 U	0.2 U	3 U				
EX-6-10.0	0.03 U	0.05 U	0.05 U	0.2 U	3 U				
EX-7-10.0	0.03 U	0.05 U	0.05 U	0.2 U	11	140	290		
EX-8-11.0	0.03 U	0.05 U	0.05 U	0.2 U	3 U				
EX-9-11.0	0.03 U	0.05 U	0.05 U	0.2 U	3 U				
EX-10-14.0	0.03 U	0.05 U	0.05 U	0.2 U	3 U			0.1 U	
North service bay excavation									
BEX-1-8.0	0.03 U	0.05 U	0.05 U	0.2 U	18	25 U	50 t	J	
BEX-2-8.0	0.03	0.05 U	0.1	0.2 U	64	25 U	81		
BEX-3-12.0	0.03 U	0.05 U	0.05 U	0.2 U	3 U	25 U	50 t		
BEX-4-8.0					3 U	25 U	50 t		
BEX-5-8.0					6	25 U	50 t		7
BEX-6-8.0					10	25 U	50 t		
BEX-7-8.0 <sup>7</sup>					12	25 U	50 t		
BEX-8-8.0	0.03 U	0.05 U	0.05 U	0.2 U	4	25 U	50 t		
South service bay test pit									
TP-1-4.0 <sup>8</sup>					3	25 U	50 t		
TP-1-8.0					4	25 U	50 t		
Heating oil and waste oil USTs excavation	on						-	,	
WOEX-1-6.0						25 U	50 t		
WOEX-2-6.0						35	83		
WOEX-3-8.0 <sup>8, 9</sup>						25 U	50 t		
WOEX-4-6.0						25 U	78		
WOEX-5-6.0	7				'	25 U	97		
WOEX-6-8.0 <sup>7, 10</sup>						37	140		
Non-contaminated stockpile									
CSP-1	0.03 U	0.05 U	0.05 U	0.2 U	3 U				
CSP-2	0.03 U	0.05 U	0.05 U						
CSP-3	0.03 U	0.05 U	0.05 U						
CSP-4	0.03 U	0.05 U	0.05 U	0.2 U					
CSP-5	0.03 U	0.05 U	0.05 U						
Heating oil and waste oil USTs stockpile									
WOSP-1						25 U	9,300		
MTCA Method A Soil Cleanup Level	0.03	7.0	6.0	9.0	30 <sup>11</sup>	2,000	2,000		250

## Notes

- <sup>1</sup>Samples analyzed by CCI Analytical Laboratories, Inc. of Everett, Washington.
- <sup>2</sup> Soil sample locations are shown on Figure 2. The number following the second hyphen is the depth, in feet and tenths of feet, that the sample was obtained from.
- <sup>3</sup> By EPA Method 8021B.
- <sup>4</sup>By Ecology Method NWTPH-G.
- <sup>5</sup> By Ecology Method NWIPH-Dx.
- <sup>6</sup> Total lead by EPA Method 6010.
- <sup>7</sup> Samples BEX-7-8.0 and WOEX-6-8.0 were also tested for arsenic, cadmium, chromium, lead and mercury by EPA Method 6010 or 7471. Arsenic and cadmium were not detected in BEX-7-8.0. Chromium, lead and mercury were detected at concentrations of 34, 7.9 and 0.06 mg/Kg, resectively, less than the MTCA Method A cleanup levels in sample BEX-7-8.0. Cadmium was not detected in WOEX-6-8.0. Arsenic, chromium, lead and mercury were detected at concentrations of 14, 40, 140 and 0.11 mg/Kg, resectively, less than the MTCA Method A cleanup levels in sample WOEX-6-8.0.
- 8 Samples TP-1-4.0 and WOEX-3-8.0 were also tested for chlorinated volatile organic compounds by EPA Method 8260. CVOCs were not detected in sample TP-1-4.0. 1,2-dichloroethane was detected in sample WOEX-3-8.0 at a concentration of 0.022 mg/Kg, less than the MTCA Method B (Clarc 2) cleanup level of 11 mg/Kg. No other CVOCs were detected in sample WOEX-3-8.0.
- <sup>9</sup> Sample WOEX-3-8.0 was also tested for carcinogenic PAHs by EPA Method 8270. Carcinogenic PAHs were not detected in this sample.
- <sup>10</sup> Sample WOEX-6-8.0 was also tested for PCBs by EPA Method 8081. PCBs were not detected in this sample.
- <sup>11</sup> The MTCA Method A Soil Cleanup Level for GRO is 100 mg/Kg for mixtures without benzene and where the total of ethylbenzene, toluene and xylenes is less than 1% of the mixture, and 30 mg/Kg for all other mixtures.

mg/Kg = milligrams per kilogram

- "--" = not tested
- DQ = data qualifier
- $\mathbf{U}$  = not detected at or above the specified concentration
- J = estimated concentration outside instrument calibration range

Shaded and bolded concentrations exceed the current MTCA Method A soil cleanup levels.

#### ATTACHEMENT A – FIELD PROCEDURES

#### SOIL SAMPLING

1 4 1 1 1

Soil samples were obtained from the excavations using the excavator bucket. Each excavation sample was transferred from the excavator bucket to an unused plastic bag using a decontaminated stainless steel trowel. Each stockpile sample was obtained directly from the stockpile using a decontaminated stainless steel trowel and was transferred directly to an unused plastic bag.

Each sample not intended for laboratory testing was transferred to an unused plastic bag. Each sample intended for possible laboratory testing was immediately split, one portion of each sample was transferred to a laboratory-prepared sample jar which was filled completely to eliminate headspace, a second portion was sampled for volatiles using EPA Method 5025 methodology and equipment, and a third portion was transferred to an unused plastic bag. The sample jars were labeled with information including the job number, the sample number, the sampling date and the requested analyses. The portion of each sample which was placed in the plastic bag was retained for soil identification, and field screened for evidence of petroleum-related contamination.

#### **DECONTAMINATION PROCEDURES**

All sampling or measuring equipment coming in direct contact with the soil samples, specifically including the sampling trowel, were decontaminated before each sampling attempt or other contact. The decontamination procedure consisted of washing the equipment in a Liquinox solution, and rinsing the equipment with distilled water.

#### FIELD SCREENING PROCEDURES

A Pinnacle GeoSciences, Inc. representative field screened all soil samples. Field screening results were used as a general guideline to delineate areas of possible petroleum-related contamination. In addition, screening results were used to aid in the selection of soil samples for potential chemical analysis. The screening methods used included the following: visual screening, headspace vapor screening and water sheen screening.

Visual screening consists of inspecting the soil for stains indicative of petroleum-related contamination. Visual screening is generally more effective when contamination is related to heavy petroleum hydrocarbons such as motor oil, or when hydrocarbons concentrations are high. Headspace and water sheen screening is a more sensitive method that has been effective in detecting contamination at concentrations less than regulatory cleanup guidelines. However, field screening results are site-specific. The effectiveness of field screening results will vary with ambient temperature; and soil moisture content, organic content, soil type, and type and age of contaminant. The presence or absence of a sheen does not necessarily indicate the presence or absence of petroleum hydrocarbons.

Head space vapor screening involves placing about one to two cups of soil into a plastic bag. Air is captured in the bag, and it is sealed. The bag is shaken to volatilize contaminants in

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the soil. The probe of an instrument designed to measure photoionizable vapors, in this case a RAE Instruments Mini RAE Plus Classic photoionization detector, is then inserted into the bag and the vapor concentration is measured. Headspace vapor screening generally is only effective in detecting volatile hydrocarbons.

Water sheen screening involves placing about one tablespoon of soil in water and observing the water surface for signs of a petroleum sheen. Sheen screening may detect both volatile and non-volatile petroleum hydrocarbons, although it is more effective at detecting non-volatile contaminants. Sheens observed are classified as follows:

NS (no sheen)

1 (1 )

No visible sheen on the water surface.

SS (slight sheen)

Light, colorless, dull sheen; spread is irregular, not rapid. Natural organic oils or iron bacteria in the soil may produce a slight sheen.

MS (moderate sheen)

Pronounced sheen over limited area; probably has some color/iridescence; spread is irregular, may be rapid; sheen does not spread over entire water surface.

HS (heavy sheen)

Heavy sheen with pronounced color/iridescence; spread is rapid; the entire water surface is covered with sheen.

## ATTACHEMENT B - LABORATORY REPORTS

g. f.s. g. 2





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE:

12/17/2008

CCIL JOB #: DATE RECEIVED: 0812058 12/10/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/10/2008 9:45 CSP-1

CCIL SAMPLE #:

-01

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	12/10/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/10/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/10/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/10/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/10/2008	DLC

<sup>\* &</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>\*\*\*</sup> ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/17/2008

CCIL JOB #:

0812058

DATE RECEIVED: WDOE ACCREDITATION #:

12/10/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: CLIENT SAMPLE ID: (b) (6) 0260-002 12/10/2008 9:50 CSP-2

CCIL SAMPLE #:

-02

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	12/10/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/10/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/10/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/10/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/10/2008	DLC

<sup>\* &</sup>quot;ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>\*\*\*</sup> ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 CCIL JOB #:

DATE:

12/17/2008

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0812058

WDOE ACCREDITATION #:

12/10/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/10/2008 9:55 CSP-3

CCIL SAMPLE #:

-03

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	12/10/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/10/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/10/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/10/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/10/2008	DLC

<sup>&</sup>quot; "NO" INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>&</sup>quot;" ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/17/2008

CCIL JOB #:

0812058

DATE RECEIVED: WDOE ACCREDITATION #:

12/10/2008 C1336

CLIENT CONTACT:

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CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/10/2008 10:45 EX-1-11.0

CCIL SAMPLE #:

-04

#### DATA RESULTS

ANALYTE TPH-Volatile Range	METHOD NWTPH-GX	RESULTS* ND(<3)	UNITS** MG/KG	ANALYSIS DATE 12/11/2008	ANALYSIS BY DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/11/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/11/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	12/11/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	12/11/2008	EBS

<sup>&</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>\*\*\*</sup> ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/17/2008

CCIL JOB #:

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DATE RECEIVED: WDOE ACCREDITATION #:

12/10/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/10/2008 10:50 EX-2-11.0

CCIL SAMPLE #:

-05

DATA RESULTS
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ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	12/11/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/11/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/11/2008	DLC

<sup>&</sup>quot; "NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>\*\*\*</sup> ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/17/2008

CCIL JOB #:

0812058

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12/10/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/10/2008 11:25 EX-3-12.0

CCIL SAMPLE #: -0

-06

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	5	MG/KG	12/11/2008	DLC
Methyl T-Butyl Ether***	EPA-8021	ND(<0.1)	MG/KG	12/11/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/11/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/11/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	12/11/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	12/11/2008	EBS
Lead	EPA-6010	ND(<5.0)	MG/KG	12/16/2008	BAM

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE. RESULT BIASED HIGH DUE TO SEMI-VOLATILE PRODUCT OVERLAP.

<sup>&</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>\*\*\*</sup> ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

CCIL JOB #:

12/17/2008

DATE RECEIVED:

DATE:

0812058 12/10/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: CLIENT SAMPLE ID:

(b) (6) 0260-002 12/10/2008 12:30 CSP-4

CCIL SAMPLE #:

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	12/11/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/11/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/11/2008	DLC

<sup>\* &</sup>quot;NO" INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES,

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>\*\*\*</sup> ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/17/2008

CCIL JOB #:

0812058

DATE RECEIVED: WDOE ACCREDITATION #:

12/10/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: CLIENT SAMPLE ID:

(b) (6) 0260-002 12/10/2008 12:35 CSP-5

CCIL SAMPLE #:

-08

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	12/11/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/11/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/11/2008	DLC

<sup>&</sup>quot; "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>\*\*\*</sup> ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/17/2008

DATE RECEIVED:

0812058

WDOE ACCREDITATION #:

12/10/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/10/2008 12:55 EX-4-10.0

CCIL SAMPLE #:

-09

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	15	MG/KG	12/11/2008	DLC
Methyl T-Butyl Ether***	EPA-8021	ND(<0.1)	MG/KG	12/11/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/11/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/11/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	12/11/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	12/11/2008	EBS
Lead	EPA-6010	6.3	MG/KG	12/16/2008	BAM

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE. RESULT BIASED HIGH DUE TO SEMI-VOLATILE PRODUCT OVERLAP).

<sup>\*\*</sup>NOT INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>\*\*\*</sup> ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/17/2008

CCIL JOB #:

0812058

DATE RECEIVED: WDOE ACCREDITATION #:

12/10/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/10/2008 12:50 EX-5-12.0

CCIL SAMPLE #:

-10

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	12/11/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/11/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/11/2008	DLC

<sup>\* &</sup>quot;NO" INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>\*\*\*</sup> ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

DATE: CCIL JOB #: 12/17/2008

DATE RECEIVED:

0812058 12/10/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/10/2008 13:35 EX-6-10.0

CCIL SAMPLE #:

-11

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	12/11/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/11/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/11/2008	DLC

<sup>&</sup>quot; "NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>&</sup>quot; ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/17/2008

DATE RECEIVED:

0812058 12/10/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: (

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/10/2008 13:45 EX-7-10.0

CCIL SAMPLE #:

-12

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	11	MG/KG	12/11/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/11/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/11/2008	DLC
TPH-Diesel Range	NWTPH-DX	140	MG/KG	12/11/2008	EBS
TPH-Oil Range	NWTPH-DX	290	MG/KG	12/11/2008	EBS

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCTS WHICH ARE LIKELY HIGHLY WEATHERED GASOLINE, LIGHT OIL AND LUBE OIL.  $\cdot$ 

RESULT BIASED HIGH DUE TO SEMI-VOLATILE PRODUCT OVERLAP.

<sup>\* &</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>\*\*\*</sup> ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

DATE RECEIVED:

12/17/2008

0812058

WDOE ACCREDITATION #:

DATE:

CCIL JOB #:

12/10/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/10/2008 13:50 EX-8-11.0

CCIL SAMPLE #:

-13

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	12/11/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/11/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/11/2008	DLC

<sup>\* &</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>\*\*\*</sup> ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

CCIL JOB #:

12/17/2008

DATE RECEIVED:

DATE:

0812058

WDOE ACCREDITATION #:

12/10/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/10/2008 13:55 EX-9-11.0

CCIL SAMPLE #:

-14

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	12/11/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/11/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/11/2008	DLC

<sup>\* &</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>\*\*\*</sup> ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC. 13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/17/2008

CCIL JOB #:

0812058

DATE RECEIVED:

12/10/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/10/2008 14:00 EX-10-14.0

CCIL SAMPLE #:

-15

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	12/11/2008	DLC
Methyl T-Butyl Ether***	EPA-8021	ND(<0.1)	MG/KG	12/11/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/11/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/11/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/11/2008	DLC
Lead	EPA-6010	ND(<5.0)	MG/KG	12/16/2008	BAM

APPROVED BY:

FAX 425 356-2626

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>\*\*\*</sup> ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS.





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/17/2008 0812058

DATE RECEIVED:

12/10/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: (b) (6) 0260-002

#### QUALITY CONTROL RESULTS

#### SURROGATE RECOVERY

CCIL SAMPLE ID	METHOD	SUR ID	% RECV
0812058-01	NWTPH-GX	TFT	77
0812058-01	EPA-8021	TFT	77
0812058-02	NWTPH-GX	TFT	77
0812058-02	EPA-8021	TFT	78
0812058-03	NWTPH-GX	TFT	78
0812058-03	EPA-8021	TFT	78
0812058-04	NWTPH-GX	TFT	88
0812058-04	EPA-8021	TFT	78
0812058-04	NWTPH-DX	C25	116
0812058-05	NWTPH-GX	TFT	72
0812058-05	EPA-8021	TFT	74
0812058-06	NWTPH-GX	TFT	77
0812058-06	EPA-8021	TFT	77
0812058-06	NWTPH-DX	C25	107
0812058-07	NWTPH-GX	TFT	86
0812058-07	EPA-8021	TFT	80
0812058-08	NWTPH-GX	TFT	84
0812058-08	EPA-8021	TFT	79
0812058-09	NWTPH-GX	TFT	89
0812058-09	EPA-8021	TFT	82
0812058-09	NWTPH-DX	C25	90
0812058-10	NWTPH-GX	TFT	77
0812058-10	EPA-8021	TFT	78
0812058-11	NWTPH-GX	TFT	77
0812058-11	EPA-8021	TFT	81
0812058-12	NWTPH-GX	TFT	84
0812058-12	EPA-8021	TFT	83
0812058-12	NWTPH-DX	C25	110
0812058-13	NWTPH-GX	TFT	81
0812058-13	EPA-8021	TFT	72
0812058-14	NWTPH-GX	TFT	76
0812058-14	EPA-8021	TFT	72
0812058-15	NWTPH-GX	TFT	83
0812058-15	EPA-8021	TFT	79





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/17/2008

CCIL JOB #:

0812058

DATE RECEIVED:

12/10/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: (b) (

(b) (6) 0260-002

#### QUALITY CONTROL RESULTS

#### **BLANK RESULTS**

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
NWTPH-GX	Soil	GS121008	0812058-01 to 15	TPH-Volatile Range	ND(<3)	MG/KG
EPA-8021	Soll	GS121008	0812058-06,09,15	Methyl T-Butyl Ether***	ND(<0.1)	MG/KG
EPA-8021	Soil	GS121008	0812058-01 to 15	Benzene	ND(<0.03)	MG/KG
EPA-8021	Soli	GS121008	0812058-01 to 15	Toluene	ND(<0.05)	MG/KG
EPA-8021	Soil	GS121008	0812058-01 to 15	Ethylbenzene	ND(<0.05)	MG/KG
EPA-8021	Soil	GS121008	0812058-01 to 15	Xylenes	ND(<0.2)	MG/KG
NWTPH-DX	Soll	DS121008	0812058-04,06,09,12	TPH-Diesel Range	ND(<25)	MG/KG
NWTPH-DX	Soil	DS121008	)812058-04,06,09,12	TPH-Oil Range	ND(<50)	MG/KG
EPA-6010	Soll	ICPS121608-2	0812058-06,09,15	Lead	ND(<5.0)	MG/KG





DATE:

12/17/2008

SPITE

CLIENT: PINNACLE GEOSCIENCES, INC. 13620 NE 20TH ST. SUITE J

CCIL JOB #:

0812058

BELLEVUE, WA 98005

DATE RECEIVED: WDOE ACCREDITATION #:

12/10/2008 C1336

CLIENT CONTACT:

**NORM PURI** 

CLIENT PROJECT ID: (b)

(b) (6) 0260-002

### QUALITY CONTROL RESULTS

#### BLANK SPIKE/BLANK SPIKE DUPLICATE RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	BLANK SPIKE RECOVERY	BLANK SPIKE DUP RECOVERY	RPD
NWTPH-GX	Soll	GS121008	0812058-01 to 15	TPH-Volatile Range	76 %	81 %	6
EPA-8021	Soll	GS121008	0812058-06,09,15	Methyl T-Butyl Ether	99 %	102 %	3
EPA-8021	Soil	GS121008	0812058-01 to 15	Benzene	106 %	105 %	1
EPA-8021	Soll	GS121008	0812058-01 to 15	Toluene	112 %	111 %	1
EPA-8021	Soll	GS121008	0812058-01 to 15	Ethylbenzene	106 %	104 %	2
EPA-8021	Soll	GS121008	0812058-01 to 15	Xylenes	112 %	111 %	1
NWTPH-DX	Soli	DS121008	0812058-04,06,09,12	TPH-Diesel Range	89 %	94 %	5
EPA-6010	Soil	ICPS121608-2	0812058-06,09,15	Lead	99 %	101 %	2

Instrument #98

Data File: C:\HPCHEM\1\DATA\98812111\007F1101.D

Operator:

Method:

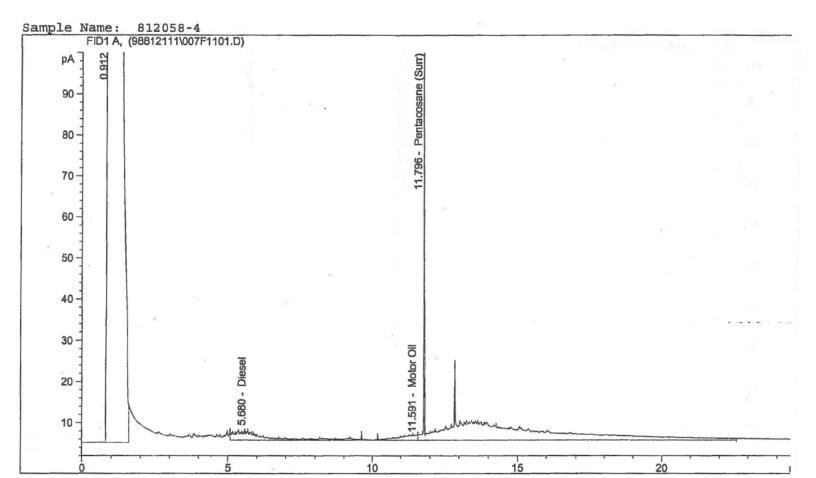
C:\HPCHEM\1\METHODS\FDMO0108.M

Injection Date & Time: 12/11/2008 4:32:35 PM 12/11/2008 4:32:35 PM

Report Creation:

12/12/2008

8:41:49 AM



Ret. Time	Signal	Compound	Name	Response	Amount ug/mL	
5.680 11.591 11.796	FID1 A,	Diesel Motor Oil Pentacosane	(Surr)	230.087 1155.611 212.012	14.275 86.879 11.636	116%
				 	20.03g	

D<25 mg/kg MO<50 mg/kg

& DATE

Instrument #98 Data File: C:\HPCHEM\1\DATA\98812111\008F1201.D

Operator: EBS Method: C:\H

C:\HPCHEM\1\METHODS\FDMO0108.M

Injection Date & Time: 12/11/2008 5:02:53 PM 12/11/2008 5:02:53 PM

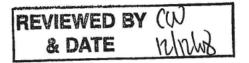
Report Creation: 12/12/2008 10:39:18 AM

Sample Name: 812058-6 FID1 A, (98812111\008F1201.D) pA -0.911 11.786 - Pentacosane (Surr) 17.147 - Motor Oil 90 80 70 60 50 40 30 20 10

Ret. Time	Signal	Compound	Name	Response	Amount ug/mL	
0.000 11.786 17.147	FID1 A,	Diesel Pentacosane Motor Oil	(Surr)	0.000 194.748 263.866	0.000 10.689 19.838	107/.
					20.039	

10

D < 25 mg/kg MO < 50 mg/kg



15

20

Instrument #98

Data File: C:\HPCHEM\1\DATA\98812111\055B1101.D

Operator:

Method:

EBS

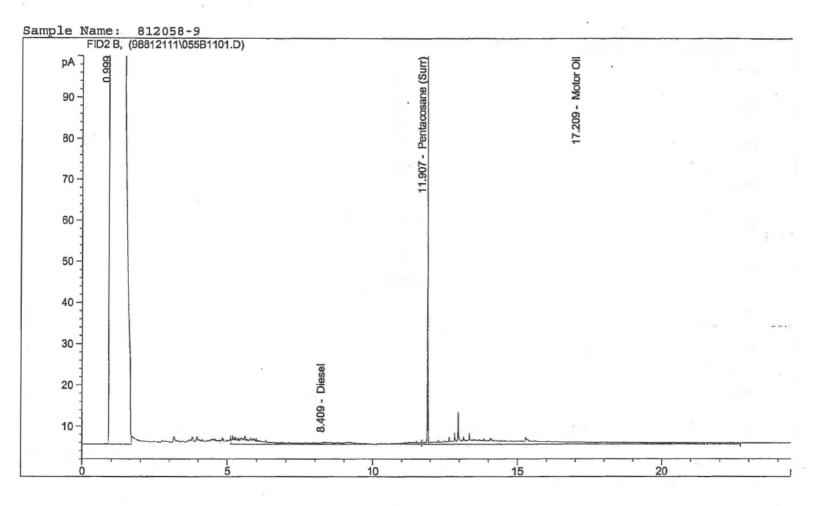
C:\HPCHEM\1\METHODS\BDM01107.M

Injection Date & Time: 12/11/2008 4:32:36 PM 12/11/2008 4:32:36 PM

Report Creation:

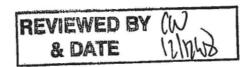
12/12/2008

10:34:30 AM



Ret. Time Signal	Compound Name	Response	Amount ug/mL
8.409 FID2 B, 11.907 17.209	Diesel Pentacosane (Surr) Motor Oil	159.419 160.582 365.918	10.906 9.001 <b>9</b> 0 /. 29.489
			20.079

D < 25 mg/kg M0 < 50 mg/kg



Instrument #98 Data File: C:\HPCHEM\1\DATA\98812111\056B1201.D

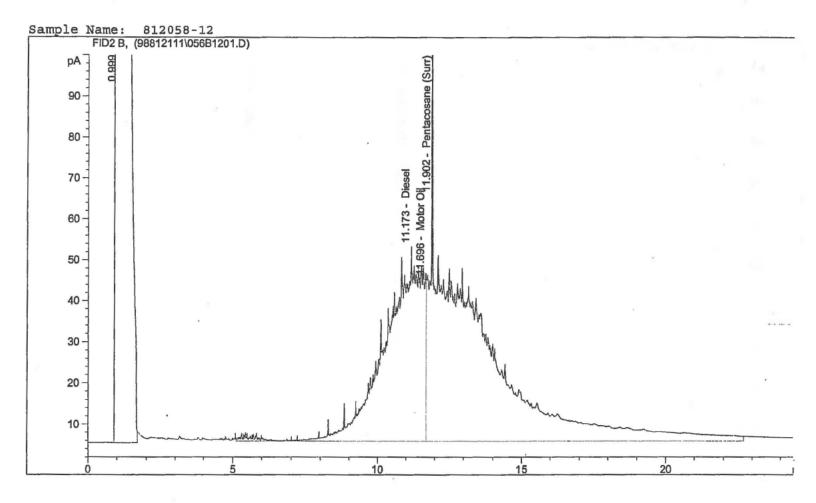
Operator: EBS

Method:

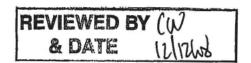
C:\HPCHEM\1\METHODS\BDM01107.M

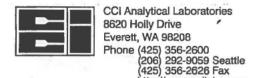
Injection Date & Time: 12/11/2008 5:02:54 PM 12/11/2008 5:02:54 PM

Report Creation: 12/12/2008 8:44:14 AM



Ret. Time	Signal	Compound	Name	(A)	Response	Amount ug	g/mL	
11.173 11.696 11.902	FID2 B,	Diesel Motor Oil Pentacosane	(Surr)	,	4213.303 7199.873 196.691	58	38.232 30.223 L1.024	110%
			100			20.	039	





## Chain Of Custody/ Laboratory Analysis Request

 CCI Job#	(Laboratory Use Only)
010	020

812058

	cciiaos.com				_												Date	- family	ا ربان		Page.			_ Of		=
PROJECT ID: (b) (6)	260-0	02			AN	ALY	SIS	REC	UES	STE	)									OTH	HER (	Spec	ify)			
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Euroil cosetts to Stap- (b) (6)										_ ]	A 8260			y EP	by EP	941/8	믕	Th	Pest	ľ	- Jan					NO.
PHONE:	FAX:				1.				EPA-8260	8260	by EPA	(Len	Ì	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM	EPA 8081/8082	Metais-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL	-5	TCLP-Metals □ VOA □ Semi-Voi □ Pest □ Herbs □		12				RS.	RECEIVED IN GOOD CONDITION?
P.O. NUMBER:	E-MAIL:								PA-8	/ EPA	spun	M (wa	<u>(i)</u>	трог	arbons	þ	A-8	13	emi-		, `				AINE	8
INVOICE TO Proper &	a Sim	65			1					les by	Compounds	S 09	s) 09;	000	ydroc	S	RCR.	(f)	A S		27				CONTAINERS	00
ATTENTION:					1			-802	1-802	Volati		PA 82	PA 8	Organ	natic H	Pesticides	2	(Spec	0 0		29				OF C	Z
ADDRESS:					NWTPH-HCID	ă	8	BTEX by EPA-8021	MTBE by EPA-802) C	Halogenated Volatiles by	Volatile Organic	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	atile	c Aron		MTCA	Metals Other (Specify)	etals		2					VED
OAAABI E I B	DATE		77/05	145/	표	NWTPH-DX	NWTPH-GX	EX by	TBEb	loger	latile	B/ED	B/E0	mlvo	lycycli	ЬСВ □	tals-	stais (	LP-M		EN		}		NUMBER	SE
SAMPLE I.D.	DATE	TIME	TYPE	LAB#	Z	Z		<u>m</u>	Σ	当	8	<u>B</u>	8	SS	요	2	ž	Σ	위	-		+	+	_		Œ
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2. CF-7	, 1	0950	£ .	2	-	-	X	X											_	_	X	$\perp$			2	
3. CSR-3 -		0955		3			X	X													X	$\perp$			2	
4. EX-1-11.0		1045		4		×	X	X	1										-		X				2	
5. EX-7-11.0	*	1050	4	5			X	X	400												X				2	
6. FX-3-120 (		1125	طفه مطاوحته ور	6		B	X	X	7									X			X				2	
7. CSP-4		1230		7			X	X		i.											X				2	
8. CSP-5	1	1235	-	X			X	X		,		£									X				2	
9. EX-4-10.0		1255		9		B	X	×	X				,					X			X				2	
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SIGNATURES (Name, Company	, Date, Tim	ne):				, ji		,	-										REQ	UES	TED in		ness D			
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CCI Analytical Laboratories 8620 Holly Drive
Everett, WA 98208 Phone (425) 356-2600 (206) 292-9059 Seattle (425) 356-2626 Fax

# Chain Of Custody/ Laboratory Analysis Request

CI Jol	<b>b#</b>	(Laboratory Use Only)
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	http://www.ccilabs.com																											
PROJECT ID: (b) (6)	0260-0	200	K1		AN	ALY:	SIS	REG	UES	STEE	)								′	OTHER (Specify)								
COMPANY: FINDON OF SE	Saene	es			1	-1																				4		
MANAGER: /// Kar	J. de	,						7	* :-	* ]		2 ·		8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM	2	<u> </u>	-	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐		12	\	-					
ADDRESS: Execut lesuft	to Strue		-								8260			EPA 8	y EPA-E	1/808	T 🗆	40	st		Sampling				- }			Si No
PHONE:	FAX:	······							260 🗆	8260	by EPA	(ser)		Semivolatile Organic Compounds by EPA 8270	(PAH) by	EPA 8081/8082	Metals-MTCA-5□ RCRA-8 □ Pri Pol □ TAL	Chil	ol 🗆 Pe		K	3					RS	RECEIVED IN GOOD CONDITION?
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SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021	Halogenated Volatiles by	Volatile Organic	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soll)	Semivo	olycycl	PCB 🗆	Aetals-	Metals Other (Specify)	CLP-M		FR						NUMBER	RECE
1. EX-6-10.0	14/19/10			1.1	-	_	V	X	-	7				0,		-	_	_			X				1		2	
2. FX-7-10.0	17/	1345	1	12		V	X	X	*												X						2	$\neg$
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CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 CCIL JOB #:

DATE:

12/15/2008

DATE RECEIVED:

0812065

WDOE ACCREDITATION #:

12/11/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/11/2008 12:40 BEX-1-8.0

CCIL SAMPLE #:

-01

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	18	MG/KG	12/12/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/15/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/15/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/15/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/15/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	12/11/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	12/11/2008	EBS

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY STODDARD SOLVENT.

<sup>\* &</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot;UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/15/2008

CCIL JOB #:

0812065

DATE RECEIVED: WDOE ACCREDITATION #:

12/11/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/11/2008 13:10 BEX-2-8.0

CCIL SAMPLE #:

-02

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	64	MG/KG	12/12/2008	DLC
Benzene	EPA-8021	0.03	MG/KG	12/15/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/15/2008	DLC
Ethylbenzene	EPA-8021	0.1	MG/KG	12/15/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/15/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	12/11/2008	EBS
TPH-Oil Range	NWTPH-DX	81	MG/KG	12/11/2008	EBS

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCTS WHICH ARE LIKELY STODDARD SOLVENT AND LUBE OIL.

<sup>\* &</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

CCIL JOB #: DATE RECEIVED: 12/15/2008

DATE:

0812065 12/11/2008

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C1336

CLIENT CONTACT:

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CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/11/2008 13:40 BEX-3-12.0

CCIL SAMPLE #:

-03

	DATA RES	BULTS			*
ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	12/12/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/12/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/12/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/12/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/12/2008	DLC
TPH-Diesel Range TPH-Oil Range	NWTPH-DX NWTPH-DX	ND(<25) ND(<50)	MG/KG MG/KG	12/11/2008 12/11/2008	EBS EBS

<sup>\* &</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

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DATE RECEIVED:

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DATE:

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C1336

CLIENT CONTACT:

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CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/11/2008 13:50 BEX-4-8.0

CCIL SAMPLE #:

-04

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ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	12/12/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	12/11/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	12/11/2008	EBS

<sup>\*\*</sup>NO\*INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/15/2008

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CCIL JOB #:

0812065

DATE RECEIVED:

12/11/2008

WDOE ACCREDITATION #:

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CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID: CCIL SAMPLE #:

12/11/2008 14:25 TP-1-4.0 -05

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	3	MG/KG	12/12/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	12/11/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	12/11/2008	EBS
Dichlorodifluoromethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Chloromethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Vinyl Chloride	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Bromomethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Chloroethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Trichlorofluoromethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,1-Dichloroethene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Methylene Chloride	EPA-8260	ND(<20)	UG/KG	12/11/2008	GAP
Trans-1,2-Dichloroethene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,1-Dichloroethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Cis-1,2-Dichloroethene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
2,2-Dichloropropane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Bromochloromethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Chloroform	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,1,1-Trichloroethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,1-Dichloropropene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Carbon Tetrachloride	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,2-Dichloroethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Trichloroethene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,2-Dichloropropane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Dibromomethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Bromodichloromethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Trans-1,3-Dichloropropene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Cis-1,3-Dichloropropene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,1,2-Trichloroethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,3-Dichloropropane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Tetrachloroethylene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Dibromochloromethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,2-Dibromoethane	EPA-8260	ND(<5)	UG/KG	12/11/2008	GAP
Chlorobenzene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

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DATE:

12/15/2008

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0812065

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12/11/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/11/2008 14:25 TP-1-4.0

CCIL SAMPLE #:

-05

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
Bromoform	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,2,3-Trichloropropane	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Bromobenzene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
2-Chlorotoluene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
4-Chlorotoluene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,3 Dichlorobenzene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,4-Dichlorobenzene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,2-Dichlorobenzene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	ND(<50)	UG/KG	12/11/2008	GAP
1,2,4-Trichlorobenzene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
Hexachlorobutadiene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP
1,2,3-Trichlorobenzene	EPA-8260	ND(<10)	UG/KG	12/11/2008	GAP

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY STODDARD SOLVENT.

<sup>\* &</sup>quot;ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>\*\*</sup> UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE:

12/15/2008

CCIL JOB #: DATE RECEIVED: 0812065

WDOE ACCREDITATION #:

12/11/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/11/2008 14:30 TP-1-8.0

CCIL SAMPLE #:

-06

DATA RESULTS	74		SW 5153

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	4	MG/KG	12/12/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	12/11/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	12/11/2008	EBS

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY STODDARD SOLVENT.

<sup>\* &</sup>quot;ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES,

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13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/15/2008

CCIL JOB #:

0812065

DATE RECEIVED:

12/11/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: (b) (6)

(b) (6) 0260-002

#### QUALITY CONTROL RESULTS

#### SURROGATE RECOVERY

CCIL SAMPLE ID	METHOD	SUR ID	% RECV
0812065-01 0812065-01 0812065-01	NWTPH-GX EPA-8021 NWTPH-DX	TFT TFT C25	107 71 86
0812065-02 0812065-02 0812065-02	NWTPH-GX EPA-8021 NWTPH-DX	TFT TFT C25	80 102
0812065-03 0812065-03 0812065-03	NWTPH-GX EPA-8021 NWTPH-DX	TFT TFT C25	105 95 100
0812065-04 0812065-04	NWTPH-GX NWTPH-DX	TFT C25	111 83
0812065-05 0812065-05 0812065-05 0812065-06	NWTPH-GX NWTPH-DX EPA-8260 EPA-8260 NWTPH-GX	TFT C25 1.2-Dichloroethane-d4 4-Bromofluorobenzene TFT	111 78 119 104 110
0812065-06	NWTPH-DX	C25	95

<sup>\*</sup> SURROGATE DILUTED OUT OF CALIBRATION RANGE.





CLIENT: PINNACLE GEOSCIENCES, INC. 13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

CCIL JOB #: DATE RECEIVED: 12/15/2008 0812065 12/11/2008

WDOE ACCREDITATION #: C1336

DATE:

CLIENT CONTACT: CLIENT PROJECT ID: NORM PURI

(b) (6) 0260-002

#### QUALITY CONTROL RESULTS

#### **BLANK RESULTS**

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
<b>NWTPH-GX</b>	Soil	GS121108	0812065-01 to 06	TPH-Volatile Range	ND(<3)	MG/KG
EPA-8021	Soil	GS121108	0812065-01 to 03	Benzene	ND(<0.03)	MG/KG
EPA-8021	Soil	GS121108	0812065-01 to 03	Toluene	ND(<0.05)	MG/KG
EPA-8021	Soll	GS121108	0812065-01 to 03	Ethylbenzene	ND(<0.05)	MG/KG
EPA-8021	Soil	GS121108	0812065-01 to 03	Xylenes	ND(<0.2)	MG/KG
NWTPH-DX	Soil	DS121008	0812065-01 to 06	TPH-Diesel Range	ND(<25)	MG/KG
NWTPH-DX	Soil	DS121008	0812065-01 to 06	TPH-Oil Range	ND(<50)	MG/KG
EPA-8260	Soil	VS121108	0812065-05	Dichlorodifluoromethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Chloromethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Vinyl Chloride	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812065-05	Bromomethane	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812065-05	Chloroethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Trichlorofluoromethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	1,1-Dichloroethene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Methylene Chloride	ND(<20)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Trans-1,2-Dichloroethene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	1,1-Dichloroethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Cis-1,2-Dichloroethene	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812065-05	2,2-Dichloropropane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Bromochloromethane	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812065-05	Chloroform	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	1,1,1-Trichloroethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	1,1-Dichloropropene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Carbon Tetrachloride	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	1,2-Dichloroethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Trichloroethene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	1,2-Dichloropropane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Dibromomethane	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812065-05	Bromodichloromethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Trans-1,3-Dichloropropene	ND(<10)	UG/KG
EPA-8260	Soli	VS121108	0812065-05	Cis-1,3-Dichloropropene	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812065-05	1,1,2-Trichloroethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	1,3-Dichloropropane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Tetrachloroethylene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Dibromochloromethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	1,2-Dibromoethane	ND(<5)	UG/KG

Page 9





CLIENT: PINNACLE GEOSCIENCES, INC. 13620 NE 20TH ST. SUITE J

13620 NE 20TH ST. SUITE 3 BELLEVUE, WA 98005 DATE:

12/15/2008

CCIL JOB #:

0812065

DATE RECEIVED: WDOE ACCREDITATION #:

12/11/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: (b) (6)

(b) (6) 0260-002

#### QUALITY CONTROL RESULTS

#### **BLANK RESULTS**

METHOD	MATRIX	CC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
EPA-8260	Soil	VS121108	0812065-05	Chlorobenzene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	1,1,1,2-Tetrachloroethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Bromoform	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812065-05	1,1,2,2-Tetrachloroethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	1,2,3-Trichloropropane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Bromobenzene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	2-Chlorotoluene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	4-Chlorotoluene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	1,3 Dichlorobenzene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	1,4-Dichlorobenzene	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812065-05	1,2-Dichlorobenzene	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812065-05	1,2-Dibromo 3-Chloropropane	ND(<50)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	1,2,4-Trichlorobenzene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	Hexachlorobutadiene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812065-05	1.2.3-Trichlorobenzene	ND(<10)	UG/KG





The state of the s CERTIFICATE OF ANALYSIS

CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

DATE:

12/15/2008

CCIL JOB #:

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WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

#### QUALITY CONTROL RÉSULTS

#### BLANK SPIKE/BLANK SPIKE DUPLICATE RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	BLANK SPIKE RECOVERY	BLANK SPIKE DUP RECOVERY	RPD
NWTPH-GX	Soll	GS121108	0812065-01 to 06	TPH-Volatile Range	76 %	78 %	3
EPA-8021	Soil	GS121108	0812065-01 to 03	Benzene	107 %	107 %	0
EPA-8021	Soil	GS121108	0812065-01 to 03	Toluene	113 %	113 %	0
EPA-8021	Soil	GS121108	0812065-01 to 03	Ethylbenzene	105 %	105 %	0
EPA-8021	Soil	GS121108	0812065-01 to 03	Xylenes	112 %	113 %	1
NWTPH-DX	Soil	DS121008	0812065-01 to 06	TPH-Diesel Range	89 %	94 %	5
EPA-8260	Soil	VS121108	0812065-05	1,1-Dichloroethene	101 %	105 %	3
EPA-8260	Soil	VS121108	0812065-05	Trichloroethene	106 %	106 %	0
EPA-8260	Soll	VS121108	0812065-05	Chlorobenzene	91 %	93 %	2



CCI Analytical Laboratories 8620 Holly Drive Everett, WA 98208 Phone (425) 356-2600 (206) 292-9059 Seattle (425) 356-2626 Fax

## Chain Of Custody/ **Laboratory Analysis Request**

CCI Job#	(Laboratory Use Only)

8	12	06	3	
0		_		

http://www.ccilabs.com	Date /C/ // Page /	Of
PROJECT ID: (b) (6) 0260-002	ANALYSIS REQUESTED OTHER (Specify)	^
PROJECT ID:  REPORT TO COMPANY: Pinnack Gas Similar  PROJECT MANAGER: Norm Pari  ADDRESS: Final (Bulk to Star Perligi)		
ADDRESS: Final result to Stare Perliqui	8260 EPA 8270 W EPA-8270 S 11/8082 DI□ TAL□ DI□ TAL□	NO.2
PHONE: FAX:	y EPA-8260 ☐  y EPA 8260 ☐  tunds by EPA 8260  IM (water)  soil)  pmpounds by EPA 82  aubons (PAH) by EPA-82  aubons (PAH) by EPA-82  aubons (PAH) by EPA-82  A-8 ☐ Pri Poi ☐ TAL  A-8 ☐ Pri Poi ☐ TAL	VERS
P.O. NUMBER: E-MAIL: INVOICE TO COMPANY:	9021 8021	CONTAINERS
ATTENTION: ADDRESS:	34 - 4- 4- 4- 4- 4- 4- 4- 4- 4- 4- 4- 4-	NUMBER OF CONTAINERS RECEIVED IN GOOD CONDITION?
SAMPLE I.D. DATE TIME TYPE LAB#	NWTPH-HC NWTPH-GX NWTPH-GX NWTPH-GX MTBE by E Halogenate Halogenate CDB / EDC by EDB / EDC by ED	NUM
1. BEX-1-8.0 12/11/08 1240 5 1	XXX	2
2 BEX -2-8.0 BIO 2	XX	2
1. BEX-1-8.0  74 11/08 1740 5 1 2. BEX-2-8.0   B10   2 3. BEX-3-12.0   1340   3 4. BEX-4-8.0   1350   4 5. TP-1-8.0   1430   6	XXX	2
4. BEX-4-8.0 1350 4.		. 2
5. TP-1-40 AZS S		4
6. TP-1-80 1430 / 6	XX	2
7.		
8.		
9.		
10.		
SPECIAL INSTRUCTIONS	*	52 1

CCI Analytical	Laboratories,	, Inc accepts	and p	rocesses	this reque
	107 10410100 515100				

est on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions. TURNAROUND REQUESTED in Business Days\*

S	IGNATURES (Na	ame, Company, Date, Time	):	_	110	
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	Received By:	the Ban			14:5	7
2.	Relinquished By	/		<i>i  </i>		

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CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/24/2008

CCIL JOB #:

0812073

DATE RECEIVED: WDOE ACCREDITATION #:

12/12/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/12/2008 10:00 BEX-5-8.0

CCIL SAMPLE #:

-01

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	6	MG/KG	12/12/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	12/12/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	12/12/2008	EBS

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY STODDARD SOLVENT.

<sup>&</sup>quot; "NO" INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/24/2008

DATE RECEIVED:

0812073 12/12/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/12/2008 10:15 TANK WATER

CCIL SAMPLE #:

-02

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ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
Chloromethane	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
Vinyl Chloride	EPA-8260	ND(<0.2)	UG/L	12/18/2008	GAP
Bromomethane	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
Chloroethane	EPA-8260	2	UG/L	12/18/2008	GAP
Trichlorofluoromethane	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
Acetone	EPA-8260	81	UG/L	12/18/2008	GAP
1,1-Dichloroethene	EPA-8260	2	UG/L	12/18/2008	GAP
Methylene Chloride	EPA-8260	520	UG/L	12/18/2008	GAP
Acrylonitrile	EPA-8260	ND(<10)	UG/L	12/18/2008	GAP
Methyl T-Butyl Ether	EPA-8260	10	UG/L	12/18/2008	GAP
Trans-1,2-Dichloroethene	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
1,1-Dichloroethane	EPA-8260	56	UG/L	12/18/2008	GAP
2-Butanone	EPA-8260	10	UG/L	12/18/2008	GAP
Cis-1,2-Dichloroethene	EPA-8260	3	UG/L	12/18/2008	GAP
2,2-Dichloropropane	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
Bromochloromethane	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
Chloroform	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
1,1,1-Trichloroethane	EPA-8260	140	UG/L	12/18/2008	GAP
1,1-Dichloropropene	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
Carbon Tetrachloride	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
1,2-Dichloroethane	EPA-8260	890	UG/L	12/18/2008	GAP
Benzene	EPA-8260	420	UG/L	12/18/2008	GAP
Trichloroethene	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
1,2-Dichloropropane	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
Dibromomethane	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
Bromodichloromethane	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
Trans-1,3-Dichloropropene	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
4-Methyl-2-Pentanone	EPA-8260	55	UG/L	12/18/2008	GAP
Toluene	EPA-8260	830	UG/L	12/18/2008	GAP
Cis-1,3-Dichloropropene	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
1,1,2-Trichloroethane	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
2-Hexanone	EPA-8260	ND(<10)	UG/L	12/18/2008	GAP
1,3-Dichloropropane	EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
Tetrachloroethylene	EPA-8260	22	UG/L	12/18/2008	GAP

Page 2





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

DATE: CCIL JOB #:

12/24/2008

DATE RECEIVED:

0812073

WDOE ACCREDITATION #:

12/12/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

CLIENT SAMPLE ID:

(b) (6) 0260-002 12/12/2008 10:15 TANK WATER

CCIL SAMPLE #:

-02

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DATED	DECIS	100012
DATA	TILOU	

METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
				GAP
			12/18/2008	GAP
			12/18/2008	GAP
	8		12/18/2008	GAP
EPA-8260	20	UG/L	12/18/2008	GAP
EPA-8260		UG/L	12/18/2008	GAP
EPA-8260		UG/L	12/18/2008	GAP
EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
EPA-8260		UG/L	12/18/2008	GAP
EPA-8260	230	UG/L	12/18/2008	GAP
EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
EPA-8260	16	UG/L	12/18/2008	GAP
EPA-8260	150	UG/L	12/18/2008	GAP
EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
EPA-8260	380	UG/L	12/18/2008	GAP
EPA-8260	ND(<10)	UG/L	12/18/2008	GAP
EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
EPA-8260	380	UG/L	12/18/2008	GAP
EPA-8260	ND(<2)	UG/L	12/18/2008	GAP
EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
EPA-8270		UG/L	12/16/2008	RAL
EPA-8270	530	UG/L	12/16/2008	RAL
EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
	EPA-8260 EPA-8260 EPA-8260 EPA-8260 EPA-8260 EPA-8260 EPA-8260 EPA-8260 EPA-8260 EPA-8260 EPA-8260 EPA-8260 EPA-8260 EPA-8260 EPA-8260 EPA-8270 EPA-8270 EPA-8270 EPA-8270	EPA-8260	EPA-8260         ND(<2)	METHOD         RESULTS*         UNITS**         DATE           EPA-8260         ND(<2)





CLIENT: PINNACLE GEOSCIENCES, INC. 13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

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12/24/2008

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(b) (6) 0260-002

CLIENT SAMPLE ID:

12/12/2008 10:15 TANK WATER

CCIL SAMPLE #:

-02

DAT			

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
Bis(2-Chloroethyl)Ether	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
2-Chlorophenol	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
1,3-Dichlorobenzene	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
1,4-Dichlorobenzene	EPA-8270	150	UG/L	12/16/2008	RAL
Benzyl Alcohol	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
1,2-Dichlorobenzene	EPA-8270	300	UG/L	12/16/2008	RAL
2-Methylphenol	EPA-8270	860	UG/L	12/16/2008	RAL
Bis(2-Chloroisopropyl)Ether	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
3&4-Methylphenol	EPA-8270	630	UG/L	12/16/2008	RAL
N-Nitroso-Di-N-Propylamine	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Hexachloroethane	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Nitrobenzene	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Isophorone	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
2-Nitrophenol	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
2,4-Dimethylphenol	EPA-8270	200	UG/L	12/16/2008	RAL
Benzoic Acid	EPA-8270	ND(<130)	UG/L	12/16/2008	RAL
Bis(2-Chloroethoxy)Methane	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
2,4-Dichlorophenol	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
1,2,4-Trichlorobenzene	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Naphthalene	EPA-8270	170	UG/L	12/16/2008	RAL
4-Chloroaniline	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
2,6-Dichlorophenol	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Hexachlorobutadiene	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
4-Chloro-3-Methylphenol	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
2-Methylnaphthalene	EPA-8270	190	UG/L	12/16/2008	RAL
1-Methylnaphthalene	EPA-8270	97	UG/L	12/16/2008	RAL
Hexachlorocyclopentadiene	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
2,4,6-Trichlorophenol	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
2,4,5-Trichlorophenol	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
2-Chloronaphthalene	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
2-Nitroaniline	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Acenaphthylene	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Dimethylphthalate	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
2,6-Dinitrotoluene	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Acenaphthene	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL





CLIENT: PINNACLE GEOSCIENCES, INC. 13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/24/2008

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0812073 12/12/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/12/2008 10:15 TANK WATER

CCIL SAMPLE #:

-02

DATA	RESU	LTS
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ANALYTE		METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
3-Nitroaniline		EPA-8270	ND(<63)	UG/L	12/16/2008	RAL
2,4-Dinitrophenol		EPA-8270	ND(<130)	UG/L	12/16/2008	RAL
4-Nitrophenol		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Dibenzofuran		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
2,4-Dinitrotoluene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
2,3,4,6-Tetrachlorophenol		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Diethylphthalate		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Fluorene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
4-Chlorophenyl-Phenylether		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
4-Nitroaniline		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
4,6-Dinitro-2-Methylphenol		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
N-Nitrosodiphenylamine		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Azobenzene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
4-Bromophenyl-Phenylether		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Hexachlorobenzene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Pentachlorophenol		EPA-8270	ND(<63)	UG/L	12/16/2008	RAL
Phenanthrene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Anthracene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Carbazole		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Di-N-Butylphthalate		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Fluoranthene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Pyrene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Butylbenzylphthalate	,	EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
3,3'-Dichlorobenzidine		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Benzo[A]Anthracene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Chrysene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Bis(2-Ethylhexyl)Phthalate		EPA-8270	36	UG/L	12/16/2008	RAL
Di-N-Octylphthalate		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Benzo[B]Fluoranthene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Benzo[K]Fluoranthene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Benzo[A]Pyrene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Indeno[1,2,3-Cd]Pyrene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Dibenz[A,H]Anthracene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL
Benzo[G,H,I]Perylene		EPA-8270	ND(<25)	UG/L	12/16/2008	RAL





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

DATE:

12/24/2008

CCIL JOB #:

0812073

DATE RECEIVED: WDOE ACCREDITATION #: 12/12/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/12/2008 10:15 TANK WATER

CCIL SAMPLE #:

-02

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ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
PCB-1016	EPA-8082	ND(<5.0)	UG/L	12/17/2008	RAL
PCB-1221	EPA-8082	ND(<5.0)	UG/L	12/17/2008	RAL
PCB-1232	EPA-8082	ND(<5.0)	UG/L	12/17/2008	RAL
PCB-1242	EPA-8082	ND(<5.0)	UG/L	12/17/2008	RAL
PCB-1248	EPA-8082	ND(<5.0)	UG/L	12/17/2008	RAL
PCB-1254	EPA-8082	ND(<5.0)	UG/L	12/17/2008	RAL
PCB-1260	EPA-8082	ND(<5.0)	UG/L	12/17/2008	RAL
Arsenic	EPA-6010	ND(<40)	UG/L	12/19/2008	BAM
Barium	EPA-6010	1000	UG/L	12/19/2008	BAM
Cadmium	EPA-6010	ND(<5)	UG/L	12/19/2008	BAM
Chromium	EPA-6010	ND(<7)	UG/L	12/19/2008	BAM
Lead	EPA-6010	28000	UG/L	12/19/2008	BAM
Mercury	EPA-7470	ND(<0.2)	UG/L	12/23/2008	BAM
Selenium	EPA-6010	ND(<40)	UG/L	12/19/2008	BAM
Silver	EPA-6010	ND(<30)	UG/L	12/19/2008	BAM

<sup>&</sup>quot; "NO" INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/24/2008

CCIL JOB #:

0812073

DATE RECEIVED:

12/12/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) N 0260-002

CLIENT SAMPLE ID:

12/12/2008 12:25 WOSP-1

CCIL SAMPLE #:

-03

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	12/12/2008	EBS
TPH-Oil Range	NWTPH-DX	9300	MG/KG	12/12/2008	EBS

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY LUBE OIL.

<sup>&</sup>quot; "NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/24/2008

DATE RECEIVED:

0812073

WDOE ACCREDITATION #:

12/12/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/12/2008 13:00 WOEX-1-6.0

CCIL SAMPLE #:

-04

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	12/12/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	12/12/2008	EBS

<sup>\* &</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/24/2008

CCIL JOB #:

0812073

DATE RECEIVED:

12/12/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/12/2008 13:10 WOEX-2-6.0

CCIL SAMPLE #:

-05

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	35	MG/KG	12/12/2008	EBS
TPH-Oil Range	NWTPH-DX	83	MG/KG	12/12/2008	EBS

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCTS WHICH ARE LIKELY WEATHERED DIESEL FUEL AND LUBE OIL.

<sup>&</sup>quot; "NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>\*\*</sup> UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/24/2008

DATE RECEIVED:

0812073

WDOE ACCREDITATION #:

12/12/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/12/2008 13:20 WOEX-3-8.0

CCIL SAMPLE #:

-06

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	12/12/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	12/12/2008	EBS
Dichlorodifluoromethane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Chloromethane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Vinyl Chloride	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Bromomethane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Chloroethane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Trichlorofluoromethane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,1-Dichloroethene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Methylene Chloride	EPA-8260	ND(<20)	UG/KG	12/12/2008	GAP
Trans-1,2-Dichloroethene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,1-Dichloroethane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Cis-1,2-Dichloroethene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
2,2-Dichloropropane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Bromochloromethane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Chloroform	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,1,1-Trichloroethane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,1-Dichloropropene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Carbon Tetrachloride	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,2-Dichloroethane	EPA-8260	22	UG/KG	12/12/2008	GAP
Trichloroethene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,2-Dichloropropane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Dibromomethane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Bromodichloromethane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Trans-1,3-Dichloropropene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Cis-1,3-Dichloropropene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,1,2-Trichloroethane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,3-Dichloropropane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Tetrachloroethylene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Dibromochloromethane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,2-Dibromoethane	EPA-8260	ND(<5)	UG/KG	12/12/2008	GAP
Chlorobenzene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Bromoform	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/24/2008

CCIL JOB #:

0812073

DATE RECEIVED: WDOE ACCREDITATION #: 12/12/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/12/2008 13:20 WOEX-3-8.0

CCIL SAMPLE #:

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				ANALYSIS	ANALYSIS
ANALYTE	METHOD	RESULTS*	UNITS**	DATE	BY
1,1,2,2-Tetrachloroethane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,2,3-Trichloropropane	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Bromobenzene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
2-Chlorotoluene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
4-Chlorotoluene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,3 Dichlorobenzene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,4-Dichlorobenzene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,2-Dichlorobenzene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	ND(<50)	UG/KG	12/12/2008	GAP
1,2,4-Trichlorobenzene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Hexachlorobutadiene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
1,2,3-Trichlorobenzene	EPA-8260	ND(<10)	UG/KG	12/12/2008	GAP
Naphthalene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
1-Methylnaphthalene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
2-Methylnaphthalene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Acenaphthylene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Acenaphthene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Fluorene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Phenanthrene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Anthracene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Fluoranthene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Pyrene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Benzo[A]Anthracene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Chrysene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Benzo[B]Fluoranthene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Benzo[K]Fluoranthene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Benzo(A)Pyrene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Dibenz[A,H]Anthracene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL
Benzo[G,H,I]Perylene	EPA-8270 SIM	ND(<0.02)	MG/KG	12/12/2008	RAL

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CLIENT: PINNACLE GEOSCIENCES, INC. 13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/24/2008

DATE RECEIVED:

0812073 12/12/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/12/2008 13:20 WOEX-3-8.0

CCIL SAMPLE #:

-06

#### DATA RESULTS

ANALYTE

METHOD

**RESULTS\*** 

UNITS\*\*

ANALYSIS

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BY

\* "NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

" UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/24/2008

DATE RECEIVED:

0812073 12/12/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT: CLIENT PROJECT ID: NORM PURI

(b) (6) N 0260-002

#### QUALITY CONTROL RESULTS

#### SURROGATE RECOVERY

CCIL SAMPLE ID		METHOD	SURID	%	RECV
0812073-01 0812073-01		NWTPH-GX NWTPH-DX	TFT C25		118 87
0812073-02 0812073-02 0812073-02 0812073-02 0812073-02 0812073-02 0812073-02 0812073-02 0812073-02 0812073-02		EPA-8260 EPA-8260 EPA-8270 EPA-8270 EPA-8270 EPA-8270 EPA-8270 EPA-8270 EPA-8082 EPA-8082	1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene 2-Fluorophenol Phenol-d6 Nltrobenzene-d5 2-Fluoroblphenyl 2,4,6-Tribromophenol Terphenyl-d14 TCMX DBC		103 97 88 38 35 78 65 106 75 99
0812073-02 0812073-02 0812073-02	10X DILUTION 10X DILUTION 10X DILUTION	EPA-8260 EPA-8260 EPA-8260	1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene		103 99 94
0812073-02 0812073-02 0812073-02	100X DILUTION 100X DILUTION 100X DILUTION	EPA-8260 EPA-8260 EPA-8260	1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene		104 94 103
0812073-03 0812073-04		NWTPH-DX NWTPH-DX	C25 C25		98
0812073-05		NWTPH-DX	C25		92
0812073-06 0812073-06 0812073-06 0812073-06		NWTPH-DX EPA-8260 EPA-8260 EPA-8270 SIM	C25 1,2-Dichloroethane-d4 4-Bromofluorobenzene Terphenyl-d14		113 116 105 101

<sup>\*</sup> SURROGATE DILUTED OUT OF CALIBRATION RANGE.





CLIENT: PINNACLE GEOSCIENCES, INC. 13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

CCIL JOB #:
DATE RECEIVED:

12/24/2008 0812073 12/12/2008

WDOE ACCREDITATION #: C1336

DATE:

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: (b) (6) 0260-002

#### QUALITY CONTROL RESULTS

#### **BLANK RESULTS**

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
NWTPH-GX	Soll	GS121008	0812073-01	TPH-Volatile Range	ND(<3)	MG/KG
NWTPH-DX	Soll	DS121208	0812073-01, 03-06	TPH-Diesel Range	ND(<25)	MG/KG
NWTPH-DX	Soil	DS121208	0812073-01, 03-06	TPH-OII Range	ND(<50)	MG/KG
EPA-8260	Soll	VS121108	0812073-06	Dichlorodifluoromethane	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	Chloromethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	VInyl Chloride	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	Bromomethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	Chloroethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	Trichiorofluoromethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	1,1-Dichloroethene	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	Methylene Chloride	ND(<20)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	Trans-1,2-Dichloroethene	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	1,1-Dichloroethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	Cis-1,2-Dichloroethene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	2,2-Dichloropropane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	Bromochloromethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	Chloroform	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	1,1,1-Trichloroethane	ND(<10)	UG/KG
EPA-8260	Soli	VS121108	0812073-06	1,1-Dichloropropene	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	Carbon Tetrachioride	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	1,2-Dichloroethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	Trichioroethene	ND(<10)	UG/KG
EPA-8260	Soli	VS121108	0812073-06	1,2-Dichloropropane	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	Dibromomethane	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	Bromodichioromethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	Trans-1,3-Dichloropropene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	Cis-1,3-Dichloropropene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	1,1,2-Trichloroethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	1,3-Dichioropropane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	Tetrachloroethylene	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	Dibromochloromethane	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	1,2-Dlbromoethane	ND(<5)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	Chlorobenzene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	1,1,1,2-Tetrachloroethane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	Bromoform	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	1,1,2,2-Tetrachloroethane	ND(<10)	UG/KG





CLIENT: PINNACLE GEOSCIENCES, INC. 13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/24/2008 0812073

DATE RECEIVED: WDOE ACCREDITATION #:

12/12/2008 C1336

CLIENT CONTACT: CLIENT PROJECT ID: NORM PURI

ID: (b) (6) 0260-002

## QUALITY CONTROL RESULTS

#### **BLANK RESULTS**

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
EPA-8260	Soll	VS121108	0812073-06	1,2,3-Trichloropropane	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	Bromobenzene	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	2-Chlorotoluene	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	4-Chlorotoluene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	1,3 Dichlorobenzene	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	1,4-Dichlorobenzene	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	1,2-Dichlorobenzene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	1,2-Dibromo 3-Chloropropane	ND(<50)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	1,2,4-Trichlorobenzene	ND(<10)	UG/KG
EPA-8260	Soil	VS121108	0812073-06	Hexachlorobutadlene	ND(<10)	UG/KG
EPA-8260	Soll	VS121108	0812073-06	1,2,3-Trichlorobenzene	ND(<10)	UG/KG
EPA-8270 SIM	Soil	PAHS121208	0812073-06	Naphthalene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soll	PAHS121208	0812073-06	1-Methylnaphthalene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soil	PAHS121208	0812073-06	2-Methylnaphthalene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soil	PAHS121208	0812073-06	Acenaphthylene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soil	PAHS121208	0812073-06	Acenaphthene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soli	PAHS121208	0812073-06	Fluorene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soil	PAHS121208	0812073-06	Phenanthrene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soll	PAHS121208	0812073-06	Anthracene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soll	PAHS121208	0812073-06	Fluoranthene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soll	PAHS121208	0812073-06	Pyrene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soll	PAHS121208	0812073-06	Benzo[A]Anthracene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soll	PAHS121208	0812073-06	Chrysene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soll	PAHS121208	0812073-06	Benzo[B]Fluoranthene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soll	PAHS121208	0812073-06	Benzo[K]Fluoranthene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soil	PAHS121208	0812073-06	Benzo(A)Pyrene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soll	PAHS121208	0812073-06	Indeno[1,2,3-Cd]Pyrene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soll	PAHS121208	0812073-06	Dibenz[A,H]Anthracene	ND(<0.02)	MG/KG
EPA-8270 SIM	Soll	PAHS121208	0812073-06	Benzo[G,H,i]Perylene	ND(<0.02)	MG/KG
EPA-8260	Water	VW121508	0812073-02	Dichlorodifluoromethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Chloromethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Vinyl Chloride	ND(<0.2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Bromomethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Chloroethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Trichlorofluoromethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Acetone	ND(<25)	UG/L

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CLIENT: PINNACLE GEOSCIENCES, INC. 13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/24/2008 0812073

DATE RECEIVED: WDOE ACCREDITATION #:

12/12/2008 C1336

CLIENT CONTACT: CLIENT PROJECT ID: NORM PURI

(b) (6) 0260-002

## QUALITY CONTROL RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
EPA-8260	Water	VW121508	0812073-02	1,1-Dichloroethene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Methylene Chloride	ND(<5)	UG/L
EPA-8260	Water	VW121508	0812073-02	AcrylonItrile	ND(<10)	UG/L
EPA-8260	Water	VW121508	0812073-02	Methyl T-Butyl Ether	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Trans-1,2-Dichloroethene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,1-Dichloroethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	2-Butanone	ND(<10)	UG/L
EPA-8260	Water	VW121508	0812073-02	Cis-1,2-Dichloroethene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	2,2-Dichloropropane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Bromochloromethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Chioroform	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,1,1-Trichloroethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,1-Dichloropropene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Carbon Tetrachloride	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,2-Dichloroethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Benzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Trichloroethene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,2-Dichloropropane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Dibromomethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Bromodichloromethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Trans-1,3-Dichloropropene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	4-Methyl-2-Pentanone	ND(<10)	UG/L
EPA-8260	Water	VW121508	0812073-02	Toluene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Cis-1,3-Dichloropropene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,1,2-Trichloroethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	2-Hexanone	ND(<10)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,3-Dichloropropane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Tetrachioroethylene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Dibromochioromethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,2-Dibromoethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Chlorobenzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,1,1,2-Tetrachloroethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Ethylbenzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	m,p-Xylene	ND(<4)	UG/L
EPA-8260	Water	VW121508	0812073-02	Styrene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	o-Xylene	ND(<2)	UG/L





CLIENT: PINNACLE GEOSCIENCES, INC. 13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/24/2008

CCIL JOB #:

0812073

DATE RECEIVED: WDOE ACCREDITATION #:

12/12/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: (b) (6

(b) (6) 0260-002

## QUALITY CONTROL RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
EPA-8260	Water	VW121508	0812073-02	Bromoform	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Isopropylbenzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,1,2,2-Tetrachloroethane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,2,3-Trichloropropane	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Bromobenzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	N-Propyl Benzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	2-Chlorotoluene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,3,5-Trimethylbenzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	4-Chlorotoluene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	T-Butyl Benzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,2,4-Trimethylbenzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	S-Butyl Benzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	P-Isopropyitoluene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,3 Dichlorobenzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,4-Dichiorobenzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	N-Butylbenzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,2-Dichlorobenzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,2-Dibromo 3-Chioropropane	ND(<10)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,2,4-Trichlorobenzene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Hexachlorobutadiene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	Naphthalene	ND(<2)	UG/L
EPA-8260	Water	VW121508	0812073-02	1,2,3-Trichlorobenzene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Pyridine	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	N-Nitrosodimethylamlne	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Phenol	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Anlline	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Bis(2-Chioroethyl)Ether	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2-Chlorophenol	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	1,3-Dichlorobenzene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	1,4-Dichlorobenzene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Benzyl Alcohol	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	1,2-Dichlorobenzene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2-Methylphenol	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Bis(2-Chloroisopropyi)Ether	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	3&4-Methylphenol	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	N-Nitroso-Di-N-Propylamine	ND(<2)	UG/L





CLIENT: PINNACLE GEOSCIENCES, INC. 13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE: CCIL JOB #:

12/24/2008

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0812073 12/12/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT: CLIENT PROJECT ID: NORM PURI

(b) (6) 0260-002

## QUALITY CONTROL RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
EPA-8270	Water	SVW121608	0812073-02	Hexachioroethane	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Nitrobenzene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	isophorone	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2-Nitrophenol	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2,4-Dimethylphenoi	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Benzolc Acid	ND(<10)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Bis(2-Chloroethoxy)Methane	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2,4-Dichiorophenol	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	1,2,4-Trichiorobenzene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Naphthalene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	4-Chloroaniline	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2,6-Dichlorophenol	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Hexachlorobutadiene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	· 4-Chioro-3-Methylphenol	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2-Methylnaphthalene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	1-Methylnaphthalene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Hexachlorocyclopentadiene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2,4,6-Trichlorophenol	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2,4,5-Trichlorophenol	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2-Chloronaphthalene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2-Nitroanliine	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Acenaphthylene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Dimethylphthalate	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2,6-Dinitrotoiuene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Acenaphthene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	3-Nitroaniline	ND(<5)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2,4-Dinitrophenoi	ND(<10)	UG/L
EPA-8270	Water	SVW121608	0812073-02	4-Nitrophenol	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Dibenzofuran	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2,4-Dinltrotoluene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	2,3,4,6-Tetrachlorophenol	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Diethylphthalate	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Fluorene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	4-Chlorophenyl-Phenylether	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	4-Nitroaniline	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	4,6-Dinitro-2-Methylphenol	ND(<2)	UG/L





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/24/2008

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0812073

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12/12/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: (b) (6

(b) (6) 0260-002

## QUALITY CONTROL RESULTS

#### BLANK RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
EPA-8270	Water	SVW121608	0812073-02	N-Nitrosodiphenylamine	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Azobenzene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	4-Bromophenyl-Phenylether	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Hexachlorobenzene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Pentachlorophenol	ND(<5)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Phenanthrene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Anthracene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Carbazole	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	DI-N-Butylphthalate	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Fluoranthene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Pyrene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Butylbenzylphthalate	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	3,3'-Dichlorobenzidine	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Benzo[A]Anthracene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Chrysene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Bis(2-Ethylhexyl)Phthalate	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	DI-N-Octylphthalate	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Benzo[B]Fluoranthene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Benzo[K]Fluoranthene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Benzo[A]Pyrene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Indeno[1,2,3-Cd]Pyrene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Dibenz[A,H]Anthracene	ND(<2)	UG/L
EPA-8270	Water	SVW121608	0812073-02	Benzo[G,H,I]Perylene	ND(<2)	UG/L
EPA-8082	Water	PS121508	0812073-02	PCB-1016	ND(<0.1)	UG/L
EPA-8082	Water	PS121508	0812073-02	PCB-1221	ND(<0.1)	UG/L
EPA-8082	Water	PS121508	0812073-02	PCB-1232	ND(<0.1)	UG/L
EPA-8082	Water	PS121508	0812073-02	PCB-1242	ND(<0.1)	UG/L
EPA-8082	Water	PS121508	0812073-02	PCB-1248	ND(<0.1)	UG/L
EPA-8082	Water	PS121508	0812073-02	PCB-1254	ND(<0.1)	UG/L
EPA-8082	Water	PS121508	0812073-02	PCB-1260	ND(<0.1)	UG/L
EPA-7470	Water	HGW122308-1	0812073-02	Mercury	ND(<0.2)	UG/L
EPA-6010	Water	ICPW121908-1	0812073-02	Arsenic	ND(<40)	UG/L
EPA-6010	Water	ICPW121908-1	0812073-02	Barlum	ND(<20)	UG/L
EPA-6010	Water	ICPW121908-1	0812073-02	Cadmlum	ND(<5)	UG/L
EPA-6010	Water	ICPW121908-1	0812073-02	Chromlum	ND(<7)	UG/L
EPA-6010	Water	ICPW121908-1	0812073-02	Lead	ND(<40)	UG/L

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CLIENT: PINNACLE GEOSCIENCES, INC. 13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE: CCIL JOB #: 12/24/2008

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0812073

WDOE ACCREDITATION #:

12/12/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: (b) (6

(b) (6) 0260-002

## QUALITY CONTROL RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
EPA-6010	Water	ICPW121908-1	0812073-02	Selenlum	ND(<40)	UG/L
EPA-6010	Water	ICPW121908-1	0812073-02	Silver	ND(<30)	UG/L





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NORM PURI

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(b) (6) 0260-002

## QUALITY CONTROL RESULTS

#### **BLANK SPIKE/BLANK SPIKE DUPLICATE RESULTS**

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	BLANK SPIKE RECOVERY	BLANK SPIKE DUP RECOVERY	RPD
<b>NWTPH-GX</b>	Soli	GS121008	0812073-01	TPH-Volatile Range	76 %	81 %	6
NWTPH-DX	Soll	DS121208	0812073-01, 03-06	TPH-Dlesel Range	85 %	89 %	5
EPA-8260	Soll	VS121108	0812073-06	1,1-Dichloroethene	101 %	105 %	3
EPA-8260	Soll	VS121108	0812073-06	Trichloroethene	106 %	106 %	0
EPA-8260	Soll	VS121108	0812073-06	Chlorobenzene	91 %	93 %	2
EPA-8270 SIM	Soil	PAHS121208	0812073-06	Naphthalene	98 %	102 %	4
EPA-8270 SIM	Soll	PAHS121208	0812073-06	Acenaphthene	98 %	105 %	7
EPA-8270 SIM	Soil	PAHS121208	0812073-06	Pyrene	100 %	104 %	4
EPA-8270 SIM	Soil	PAHS121208	0812073-06	Benzo[G,H,I]Perylene	97 %	103 %	6
EPA-8260	Water	VW121508	0812073-02	1,1-Dichloroethene	101 %	102 %	1
EPA-8260	Water	VW121508	0812073-02	Benzene	100 %	102 %	3
EPA-8260	Water	VW121508	0812073-02	Trichloroethene	100 %	104 %	4
EPA-8260	Water	VW121508	0812073-02	Toluene	99 %	103 %	4
EPA-8260	Water	VW121508	0812073-02	Chlorobenzene	103 %	105 %	2
EPA-8270	Water	SVW121608	0812073-02	Phenol	31 %	30 %	1
EPA-8270	Water	SVW121608	0812073-02	2-Chlorophenol	73 %	71 %	2
EPA-8270	Water	SVW121608	0812073-02	1,4-Dichlorobenzene	60 %	50 %	18 *
EPA-8270	Water	SVW121608	0812073-02	N-Nitroso-Di-N-Propylamine	67 %	72 %	8
EPA-8270	Water	SVW121608	0812073-02	1,2,4-Trichlorobenzene	63 %	57 %	11
EPA-8270	Water	SVW121608	0812073-02	4-Chloro-3-Methylphenol	77 %	75 %	3
EPA-8270	Water	SVW121608	0812073-02	Acenaphthene	65 %	66 %	3
EPA-8270	Water	SVW121608	0812073-02	4-Nitrophenol	20 %	18 %	10
EPA-8270	Water	SVW121608	0812073-02	2,4-Dinitrotoluene	75 %	82 %	9
EPA-8270	Water	SVW121608	0812073-02	Pentachiorophenoi	85 %	83 %	2
EPA-8270	Water	SVW121608	0812073-02	Pyrene	86 %	91 %	5
EPA-8082	Water	PS121508	0812073-02	PCB-1016	89 %	82 %	8
EPA-8082	Water	PS121508	0812073-02	PCB-1260	89 %	82 %	8
EPA-7470	Water	HGW122308-1	0812073-02	Mercury	96 %	97 %	1
EPA-6010	Water	ICPW121908-1	0812073-02	Arsenic	105 %	105 %	0
EPA-6010	Water	ICPW121908-1	0812073-02	Barlum	101 %	102 %	1
EPA-6010	Water	ICPW121908-1	0812073-02	Cadmlum	101 %	102 %	1
EPA-6010	Water	ICPW121908-1	0812073-02	Chromlum	104 %	105 %	1
EPA-6010	Water	ICPW121908-1	0812073-02	Lead	103 %	104 %	1
EPA-6010	Water	ICPW121908-1	0812073-02	Selenium	107 %	108 %	1
EPA-6010	Water	ICPW121908-1	0812073-02	Silver	105 %	106 %	1





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

DATE: CCIL JOB #: 12/24/2008

0812073

DATE RECEIVED: WDOE ACCREDITATION #: 12/12/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

## QUALITY CONTROL RESULTS

## BLANK SPIKE/BLANK SPIKE DUPLICATE RESULTS

METHOD MATRIX QC BATCH ID

ASSOCIATED SAMPLES

ANALYTE

BLANK SPIKE RECOVERY

DUP RECOVERY

\* RPD OUTSIDE OF CONTROL LIMITS. ASSOCIATED SPIKE RESULTS WITHIN CONTROL LIMITS. NO CORRECTIVE ACTION TAKEN.

APPROVED BY:



Received By:

CCI Analytical Laboratories 8620 Holly Drive Everett, WA 98208 Phone (425) 356-2600 (206) 292-9059 Seattle

# Chain Of Custody/ Laboratory Analysis Request

CCI Job#	(Laboratory Use Only)
-	

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PHONE:	FAX:					٠, ,			□ 097	8260	EPA	er)	-	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM	by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 🗷 Pri Pol 🗆 TAL		TCLP-Metals ☐ VOA ☐ Semi-Voi ☐ Pest ☐ Herbs ☐		N						RS	RECEIVED IN GOOD CONDITION?
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INVOICE TO Pinned					] ,					es by	mbon	eo SII	e0 (so	c Cor	/droca		RCRA	(ý)	S		33						CONTAINERS	90
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ADDRESS;	11			Sec.	NWTPH-HCID	ŏ	ĕ	BTEX by EPA-8021	MTBE by EPA-8021	Halogenated Volatiles	Volatile Organic Compounds by	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soll)	atile (	У Учош	PCB \	ATCA	Metals Other (Specify)	stals		EPA							
					E E	NWTPH-DX	NWTPH-GX	EX by	BE b	logen	atile	8 / ED	8 / ED	mivol	ycyclk	N N	tals-N	tals C	LP-M		M		Ш			-	NUMBER	CEI
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CCI Analytical Laboratories, Inc ac	cepts and p	rocesses this	request or	the terms	and c	onditi	ons	set fo	rth or	n the	reve	rse s	ide. E	By its	sign	ature	here	on, C	usto	mer a	accep	ots th	ese t	terms	s and	conc	lition	s.

SIGNATURES (Name, Company, Date, Time):

TURNAROUND REQUESTED in Business Days\*

1. Relinquished By:

TURNAROUND REQUESTED in Business Days\*

Organic, Metals & Inorganic Analysis

OTHER:

Specify:

Received By:

Received By:

Relinquished By:

5 3 2 5 SAME DAY

Fuels & Hydrocarbon Analysis

"Tend Wester" 29 by TAT





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

DATE:

12/16/2008

CCIL JOB #:

0812076

DATE RECEIVED:

12/15/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/15/2008 8:20 BEX-6-8.0

CCIL SAMPLE #:

-01

#### **DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	10	MG/KG	12/15/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	12/16/2008	DLC
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	12/16/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY STODDARD SOLVENT.

APPROVED BY:

<sup>&</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/16/2008

CCIL JOB #:

0812076

C1336

DATE RECEIVED: WDOE ACCREDITATION #:

12/15/2008

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/15/2008 8:30 BEX-7-8.0

CCIL SAMPLE #:

-02

#### DATA RESUL S

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	12	MG/KG	12/15/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	12/15/2008	DLC
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	12/15/2008	DLC
Arsenic	EPA-6010	ND(<5.0)	MG/KG	12/16/2008	BAM
Cadmium	EPA-6010	ND(<1.0)	MG/KG	12/16/2008	BAM
Chromium	EPA-6010	34	MG/KG	12/16/2008	BAM
Lead	EPA-6010	7.9	MG/KG	12/16/2008	BAM
Mercury	EPA-7471	0.06	MG/KG	12/16/2008	BAM

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY STODDARD SOLVENT.

APPROVED BY:

<sup>\*\*</sup>NO\* INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

DAT

12/16/2008

0812076

DATE RECEIVED:

CCIL JOB #:

DATE:

12/15/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

## QUALITY CONTROL RESULTS

#### SURROGATE RECOVERY

CCIL SAMPLE ID	METHOD	SUR ID	% RECV
0812076-01	NWTPH-GX	TFT	96
0812076-01	NWTPH-DX	C25	106
0812076-02	NWTPH-GX	TFT	101
0812076-02	NWTPH-DX	C25	110





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005

DATE:

12/16/2008

CCIL JOB #:

0812076

DATE RECEIVED: WDOE ACCREDITATION #: 12/15/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

## QUALITY CONTROL RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
NWTPH-GX	Soil	GS121108	0812076-01, 02	TPH-Volatile Range	ND(<3)	MG/KG
NWTPH-DX	Soil	DS121208	0812076-01, 02	TPH-Diesel Range	ND(<25)	MG/KG
NWTPH-DX	Soll	DS121208	0812076-01, 02	TPH-Oil Range	ND(<50)	MG/KG
EPA-7471	Soil	HGS121608-1	0812076-02	Mercury	ND(<0.02)	MG/KG
EPA-6010	Soil	ICPS121608-3	0812076-02	Arsenic	ND(<5.0)	MG/KG
EPA-6010	Soil	ICPS121608-3	0812076-02	Cadmium	ND(<1.0)	MG/KG
EPA-6010	Soil	ICPS121608-3	0812076-02	Chromlum	ND(<1.0)	MG/KG
EPA-6010	Soil	ICPS121608-3	0812076-02	Lead	ND(<5.0)	MG/KG





議議を 選 CERTIFICATE OF ANALYSIS

DATE:

12/16/2008

統定數

CLIENT: PINNACLE GEOSCIENCES, INC. 13620 NE 20TH ST. SUITE J

CCIL JOB #:

0812076

BELLEVUE, WA 98005

DATE RECEIVED:

12/15/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: (b) (6

(b) (6) 0260-002

## QUALITY CONTROL RESULTS

The same

#### BLANK SPIKE/BLANK SPIKE DUPLICATE RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	BLANK SPIKE RECOVERY	BLANK SPIKE DUP RECOVERY	RPD
NWTPH-GX	Soil	GS121108	0812076-01, 02	TPH-Volatile Range	76 %	78 %	3
NWTPH-DX	Soil	DS121208	0812076-01, 02	TPH-Diesel Range	85 %	89 %	5
EPA-7471	Soil	HGS121608-1	0812076-02	Mercury	99 %	103 %	4
EPA-6010	Soil	ICPS121608-3	0812076-02	Arsenic	93 %	95 %	2
EPA-6010	Soil	ICPS121608-3	0812076-02	Cadmium	98 %	100 %	2
EPA-6010	Soil	ICPS121608-3	0812076-02	Chromium	101 %	102 %	1
EPA-6010	Soll	ICPS121608-3	0812076-02	Lead	99 %	99 %	0

APPROVED BY:

Cal to



1. Relinquished By: Received By:

2. Relinquished By:

## Chain Of Custody/ **Laboratory Analysis Request**

 CCI JOD#	(Laboratory Use Only)		
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http://www.ccilabs.com													Date		7	1/0	^Pag	e			_ Of.	1		
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PHONE: FAX:					□ EPA-8260 □	4 8260	by EF	ater)		spun	s (PAH	EPA 8	Pri		Vol		18	100				1.	ERS	OND
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ADDRESS:	NWTPH-HCID	NWTPH-DX	NWTPH-GX	by EP	MTBE by EPA-8021	Halogenated Volatiles	Volatile Organic Compounds by EPA	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soll)	Semivolatile Organic Compounds by EPA	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM	PCB   Pesticides	Metals-MTCA-514 RCRA-8 ☐ Pri Poi ☐ TAL	Metals Other (Specify)	TCLP-Metals □ VOA□ Semi-Voi □ Pest □ Herbs □		By						NUMBER OF	RECEIVED IN GOOD CONDITION?
SAMPLE I.D. DATE TIME TYPE LAB#	N E	NWT	LAN	BTEX by EPA-8021	MTBE	Halog	Volati	EDB/	ED8/	Semi	Polycy	PCB	Metal	Metal	TCLP.		百						NCN	REC
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CCI Analytical Laboratories, Inc accepts and processes this request on the terms	and c	ondit	ions	set fo	rth o	n the	reve	rse s	ide. E	By its	sign	ature	here	eon, (	Custo	mer	accer	ts the	ese t	erms	and	condi	ition	
SIGNATURES (Name,/Company, Date, Time):			,																		ays*			mad .

12/15/08 //COrganic, Metals & Inorganic Analysis

Fuels & Hydrocarbon Analysis

\* Turnaround request less than standard may incur Rush Charges

OTHER:





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE:

12/23/2008

CCIL JOB #:

0812081

DATE RECEIVED:

12/16/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/16/2008 10:30 WOEX-4-6.0

CCIL SAMPLE #:

-01

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX W/CLEANUP	ND(<25)	MG/KG	12/17/2008	DLC
TPH-Oil Range	NWTPH-DX W/CLEANUP	78	MG/KG	12/17/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY LUBE OIL.

APPROVED BY:

<sup>\* &</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/23/2008

DATE RECEIVED:

0812081 12/16/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/16/2008 10:45 WOEX-5-6.0

CCIL SAMPLE #:

-02

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX W/CLEANUP	ND(<25)	MG/KG	12/17/2008	DLC
TPH-Oil Range	NWTPH-DX W/CLEANUP	97	MG/KG	12/17/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY LUBE OIL.

APPROVED BY:

<sup>&</sup>quot;TIC" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE:

12/23/2008

CCIL JOB #: DATE RECEIVED: 0812081

WDOE ACCREDITATION #:

12/16/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/16/2008 11:15 WOEX-6-8.0

CCIL SAMPLE #:

-03

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX W/CLEANUP	37	MG/KG	12/17/2008	DLC
TPH-Oil Range	NWTPH-DX W/CLEANUP	140	MG/KG	12/17/2008	DLC
PCB-1016	EPA-8082	ND(<0.1)	MG/KG	12/19/2008	RAL
PCB-1221	EPA-8082	ND(<0.1)	MG/KG	12/19/2008	RAL
PCB-1232	EPA-8082	ND(<0.1)	MG/KG	12/19/2008	RAL
PCB-1242	EPA-8082	ND(<0.1)	MG/KG	12/19/2008	RAL
PCB-1248	EPA-8082	ND(<0.1)	MG/KG	12/19/2008	RAL
PCB-1254	EPA-8082	ND(<0.1)	MG/KG	12/19/2008	RAL
PCB-1260	EPA-8082	ND(<0.1)	MG/KG	12/19/2008	RAL
Arsenic	EPA-6010	14	MG/KG	12/17/2008	BAM
Cadmium	EPA-6010	ND(<1.0)	MG/KG	12/17/2008	BAM
Chromium	EPA-6010	40	MG/KG	12/17/2008	BAM
Lead	EPA-6010	140	MG/KG	12/17/2008	BAM
Mercury	EPA-7471	0.11	MG/KG	12/17/2008	BAM

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCTS WHICH ARE LIKELY DIESEL FUEL AND LUBE OIL.

DIESEL RANGE PRODUCT RESULTS BIASED HIGH DUE TO MOTOR OIL RANGE PRODUCT OVERLAP.

APPROVED BY:

Cal to

<sup>\*\*</sup>NO\* INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/23/2008

CCIL JOB #:

0812081

DATE RECEIVED: WDOE ACCREDITATION #: 12/16/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID:

(b) (6) 0260-002

CLIENT SAMPLE ID:

12/16/2008 11:30 BEX-8-8.0

CCIL SAMPLE #:

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	4	MG/KG	12/16/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	12/16/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	12/16/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	12/16/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	12/16/2008	DLC
TPH-Diesel Range TPH-Oil Range	NWTPH-DX W/CLEANUP NWTPH-DX W/CLEANUP	ND(<25) ND(<50)	MG/KG MG/KG	12/17/2008 12/17/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY STODDARD SOLVENT.

APPROVED BY:

<sup>\* &</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot;UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J

BELLEVUE, WA 98005

DATE:

12/23/2008

CCIL JOB #:

0812081

DATE RECEIVED: WDOE ACCREDITATION #: 12/16/2008 C1336

CLIENT CONTACT: CLIENT PROJECT ID: NORM PURI

(b) (6) 0260-002

#### QUALITY CONTROL RESULTS

#### SURROGATE RECOVERY

CCIL SAMPLE ID	METHOD	SUR ID	% RECV
0812081-01	NWTPH-DX W/CLEANUP	C25	99
0812081-02	NWTPH-DX W/CLEANUP	C25	102
0812081-03	NWTPH-DX W/CLEANUP	C25	110
0812081-03	EPA-8082	TCMX	78
0812081-03	EPA-8082	DCB	107
0812081-04	NWTPH-GX	TFT	116
0812081-04	EPA-8021	TFT	79
0812081-04	NWTPH-DX W/CLEANUP	C25	100





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE:

12/23/2008

CCIL JOB #: DATE RECEIVED: 0812081

WDOE ACCREDITATION #:

12/16/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: (b) (6) 0260-002

## QUALITY CONTROL RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
NWTPH-GX	Soil	GS121108	0812081-04	TPH-Volatile Range	ND(<3)	MG/KG
EPA-8021	Soll	GS121108	0812081-04	Benzene	ND(<0.03)	MG/KG
EPA-8021	Soil	GS121108	0812081-04	Toluene	ND(<0.05)	MG/KG
EPA-8021	Soil	GS121108	0812081-04	Ethylbenzene	ND(<0.05)	MG/KG
EPA-8021	Soil	GS121108	0812081-04	Xylenes	ND(<0.2)	MG/KG
NWTPH-DX	Soil	DS121208	0812081-01 to 04	TPH-Diesel Range	ND(<25)	MG/KG
NWTPH-DX	Soil	DS121208	0812081-01 to 04	TPH-Oil Range	ND(<50)	MG/KG
EPA-8082	Soil	P121808	0812081-03	PCB-1016	ND(<0.1)	MG/KG
EPA-8082	Soil	P121808	0812081-03	PCB-1221	ND(<0.1)	MG/KG
EPA-8082	Soil	P121808	0812081-03	PCB-1232	ND(<0.1)	MG/KG
EPA-8082	Soil	P121808	0812081-03	PCB-1242	ND(<0.1)	MG/KG
EPA-8082	Soil	P121808	0812081-03	PCB-1248	ND(<0.1)	MG/KG
EPA-8082	Soil	P121808	0812081-03	PCB-1254	ND(<0.1)	MG/KG
EPA-8082	Soil	P121808	0812081-03	PCB-1260	ND(<0.1)	MG/KG
EPA-7471	Soil	HGS121708-1	0812081-03	Mercury	ND(<0.02)	MG/KG
EPA-6010	Soil	ICPS121708-1	0812081-03	Arsenic	ND(<5.0)	MG/KG
EPA-6010	Soil	ICPS121708-1	0812081-03	Cadmlum	ND(<1.0)	MG/KG
EPA-6010	Soil	ICPS121708-1	0812081-03	Chromium	ND(<1.0)	MG/KG
EPA-6010	Soil	ICPS121708-1	0812081-03	Lead	ND(<5.0)	MG/KG





CLIENT: PINNACLE GEOSCIENCES, INC.

13620 NE 20TH ST. SUITE J BELLEVUE, WA 98005 DATE: CCIL JOB #: 12/23/2008

DATE RECEIVED:

0812081

WDOE ACCREDITATION #:

12/16/2008 C1336

CLIENT CONTACT:

NORM PURI

CLIENT PROJECT ID: (b) (6

(b) (6) 0260-002

## QUALITY CONTROL RESULTS

## **BLANK SPIKE/BLANK SPIKE DUPLICATE RESULTS**

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	BLANK SPIKE RECOVERY	BLANK SPIKE DUP RECOVERY	RPD
NWTPH-GX	Soll	GS121108	0812081-04	TPH-Volatile Range	76 %	78 %	3
EPA-8021	Soll	GS121108	0812081-04	Benzene	107 %	107 %	0
EPA-8021	Soll	GS121108	0812081-04	Toluene	113 %	113 %	0
EPA-8021	Soil	GS121108	0812081-04	Ethylbenzene	105 %	105 %	0
EPA-8021	Soil	GS121108	0812081-04	Xylenes	112 %	113 %	1
NWTPH-DX	Soil	DS121208	0812081-01 to 04	TPH-Diesel Range	85 %	89 %	5
EPA-8082	Soil	P121808	0812081-03	PCB-1016	94 %	79 %	17
EPA-8082	Soil	P121808	0812081-03	PCB-1260	94 %	79 %	17
EPA-7471	Soll	HGS121708-1	0812081-03	Mercury	97 %	97 %	0
EPA-6010	Soll	ICPS121708-1	0812081-03	Arsenic	99 %	99 %	0
EPA-6010	Soil	ICPS121708-1	0812081-03	Cadmium	98 %	97 %	1
EPA-6010	Soil	ICPS121708-1	0812081-03	Chromium	102 %	101 %	1
EPA-6010	Soil	ICPS121708-1	0812081-03	Lead	95 %	96 %	- 1

APPROVED BY:

Cal to

## ATTACHEMENT C - SOIL DISPOSAL RECEIPTS

3RD AND LANDER 01 WEIGHMASTER SFO AND LANDER TIARA.C SEATTLE, WA DATE IN . 014755 - 0023 10 December,2008 9:47 am CLEARCRÉEK CONTRACTORS DATE OUT TIME OUT Des Moines Memorial Drive 10 December 2008 9:56-sm Everett, WA VEHICLE ROLL OFF Contract: LW-81462 SOIL ORIGIN REFERENCE SEATTLE/KING 00 Gross Weight 96,480,00 1b 44 CLEARCREEK Tare Weight. 40,200.00 1b-: Not Weight 56,280.00 15726,14 DESCRIPTION -UNIT. 28.14 MI TENDERED CHANGE **AFETY MEMOS:** Hard hats MUST be worn. CHECK NO. High Visibility vests MUST be worn.

SIGNATURE

Passengers MUST remain in vehicle at all times.

159143 SED AND LANDER 01 WEIGHMASTER, SECURAL COME CORE TCOOO91 TIARA C DATE IN SEATTLE, WA 014755 - 0023 10 December 2008 CLEARCREEK CONTRACTORS DATE OUT TIME OUT Des Moines Memorial Drive, Seattle 40 December 2008 11:01 am Everett, WA VEHIÇLE ROLL OFF SOIL Contract: LW-81462 REFERENCE ORIGIN SEATTLE/KING 00 Gross Weight 101,920.00 15 44 CLEARCREEK Tare Weight | 40,260.00 15 Net Weight | 61,660.00 15 30,83 75 UNIT DESCRIPTION :. .. EXTENSION 30.83 TN NET AMOUNT TENDERED CHANGE SAFETY MEMOS: Hard hats MUST be worn. ·CHECK NO. High Visibility vests' MUST be worn. Passengers MUST remain in vehicle at all times.

SEATTLE, WA
O14755 - O023
CLEARCREEK CONTRACTORS
11803 Des Moires Memorial Drive, Seattle 10 December
Everett, WA
Contract: LW-81462

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SITE TICKET 158202	208090	
WEIGHN	MASTER .	
TCOOO91 TIARA C		
10 December 2008	TIME IN	
10 December 2008.	TIME OUT 12:15 pm	
VEHICLE SOTIL	ROLL OFF	
REFERENCE ORIGIN	T CONTRACT	

00 Gross Weight 104, 120.00 15.

Tare Weight :40,160.00 15 15.

QTY.	UNIT "1"		DESCRIPTION	-	RATE	EXTENSION	TAX	TOTAL
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		Marri feli					4	

# SAFETY MEMOS:

Hard hats MUST be worn.
High Visibility vests MUST be worn.

Passengers MUST remain in vehicle at all times.

SIGNATURE

NET AMOUNT

CHANGE

CHECK,NO

3RD AND LANDER WEIGHMASTER SECO AND LANDER SEATTLE, WA 014755 - 0023 TIME OUT CLEARCREEK CONTRACTORS Des Moines Memorial Drive, Seattle 11803 ROLL OFF Everett, WA Contract: LW-81462 ORIGIN ' 00 Gross Weight 108,320.00 15 44 CLEARREKA 40,280.00 16 7.7 Tare Weight Nest Wat The AR OGO OO UNIT DESCRIPTION EXTENSION TN SW-CONT SOIL TENDERED CHANGE **SAFETY MEMOS:** CHECK NO: Hard hats MUST be worn. High Visibility vests MUST be worn. Passengers MUST remain in vehicle at all times.

SED AND LANDER TOOOO91 TIARA C DATE IN .. TIME IN SEATTLE, WA 40 December 2008 014755 - 0023 10:37 CLEARCREEK CONTRACT DATE OUT TIME OUT 11803 Des Moines Memorial Drive, 10 December 2008 Everett, WA VEHICLE . Contract: LW-8:1462 SOIL ORIGIN REFERENCE SEATTLE/KING 00 Gross Weight 103,380.00 1b 43 CLEARCREEK Tare Weight 40,260.00 lbic. 63,120.00 15 35556 T Net Weight UNIT TENDERED CHANGE SAFETY MEMOS: Hard hats MUST be worn. CHECK NO. High Visibility vests MUST be worn.

SIGNATURE

Passengers MUST remain in vehicle at all times:

158186 01 3RD AND LANDER BRD AND LANDER . WEIGHMASTER TCOXXYI TIARA C SEATTLE, WA 014755 - 0023 DATE IN 10 December 2008 11:42 am CLEARGREEK CONTRACTORS DATE OUT TIME OUT 11803 : Des Moines Memorial Drive, 10 December 2008 . 11:57 am Everett, WA VEHICLE ROLL OFF Contract: LW-81462 SOIL REFERENCE . ORIGIN SEATTLE/KING . 97,900.00 lb: 00 Gross Weight 43 CLEARCREÈK Tare Weight 40,380,00 lb (\* 57,520.00 15/20176 Net Weight DESCRIPTION . EXTENSION 28.76 MI TENDERED . CHANGE SAFETY MEMOS: CHECK NO. Hard hats MUST be worn. High Visibility vests MUST be worn... Passengers MUST remain in vehicle at all times. SIGNATURE

3RD AND LANDER WEIGHMASTER SED AND LANDER TIME IN DATE IN . SEATTLE, WA 10 Devisembles 2008 1 g OO 014755 - 0023 CLEARCREEK CONTRACTORS .1.1903 Des Moines Memorial Drive, ROLL OFF Everett, WA Contracts LW-81462 REFERENCE ORIGIN 00 Gross Weight 106,260,00 lb 43 CLEARCREEK 40,380,00 lb Tare Weight Net Weight 65, 680, 00 11 32 DESCRIPTION TOTAL 32. 94 NET AMOUNT TENDERED CHANGE **SAFETY MEMOS:** CHECK NO. Hard hats MUST be worn. High Visibility vests MUST be worn. . Passengers MUST remain in vehicle at all times. SIGNATURE -

SEA PILE, WA
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CLEARCREEK CONTRACTORS
11803 Des Moirres Memorial Drive, Seattle battur December 2008 Time drile pun
Everett, WA
Contract: LW-81462

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Tare Weight 40,940.00 It.
Net Weight 68,660.00 It.
Net Weight 68,660.00 It.
OTEA, SS TEAT SW-CONT SWEAPTON FURT.

PATE EXTENSION TAX TOTAL

## SAFETY MEMOS:

Hard hats MUST be worn.

High Visibility vests MUST be worn.

Passengers MUST remain in vehicle at all times.

SIGNATURE! MUDDING

TENDERED

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CHANGE

CHECK NO.

GROW AND LANDER SEATTLE WAY 014755 - 0023 DATEN December 2008: CLEARCREEK CONTRACTORS Seattle DATE DECEMBET Des Moines Memorial Drive, TIME OUT! Everetts WA. Contract: LW-81462 REFERENCE ORIGINSE ATTLE / KING Tarre Weight: 41,300.00 lb. Net Weight 66,840.00.15 83:44 SW-CONT STEECHIPTIDAL FL TENDERED CHANGE AFETY MEMOS: CHECK NO. Hard hats MUST be worn.

High Visibility vests MUST be worn.

Passengers MUST remain in vehicle at all times.

WEIGHMASTER 3FOD AND LANDER DATE IN TIME,IN. SEATTLE, WA 30 December 2008 014755 - 0023 CLEARCREEK CONTRACTORS Seattle SO December 2008 TIME OUT 11803 Des Moines Memorial Everett, WA VEHICLE ROLL OFF Contract: LW-81462 SOIL ORIGIN REFERENCE SEATTLE/KING OO Gross Weight. 42,300.00 lb 29,040,00 15 13,260.00 1656,28 Tare, Weight Net Weight CHANGE SAFETY MEMOS: Hard hats MUST be worn. CHECK NO. High Visibility vests MUST be worn, Passengers MUST remain in vehicle at all times.